

Service
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Service Manual

Horizontal Frequency
30-80 kHz

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING

Revision List

[illegible]

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in

undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit.

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

1. Monitor Specifications

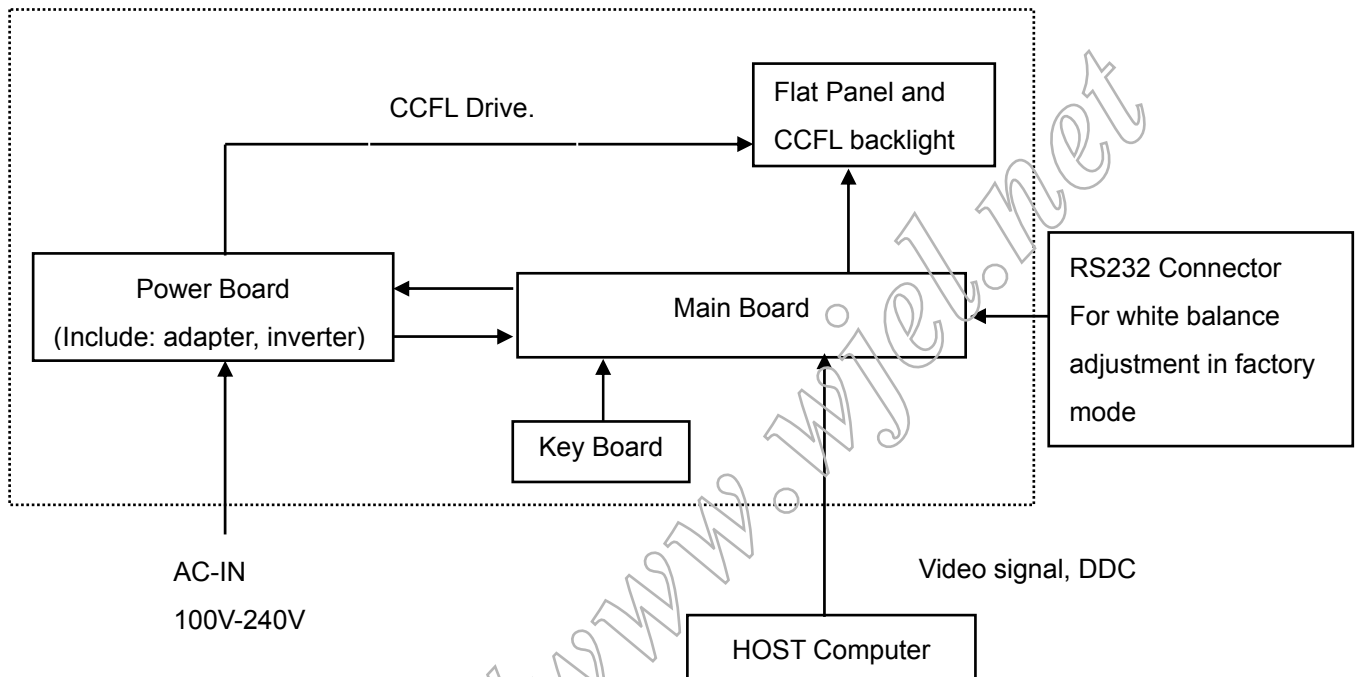
Items	Descriptions	
LCD Panel	Driving system	TFT Color LCD
	Type	HSD170MGW1-A01
	Size	17"
	Pixel pitch	0.255mm(H) x 0.255mm (V)
	Viewable angle	160° (H) 160° (V) (CR>5)
	Response time (type)	8 ms for HSD panel
Input	Sync. Type	H/V TTL
	H-Frequency	30kHz – 80kHz
	V-Frequency	50-75Hz
Power Consumption	ON Mode	< 30W
	OFF Mode	<2W
Contrast Ratio	500:1	
Dot Clock	137MHz	
White Luminance	250cd/m ²	
Max. Resolution	1440 x900	
Display Color	262,144	
Plug & Play	VESA DDC2B™	
Power Source	90~264VAC, 47~63Hz	
Environmental Considerations	Operating Temp: 0°C to 45°C Storage Temp: -20°C to 60°C Operating Humidity: 10% to 80%	

2. LCD Monitor Description

The LCD monitor will contain a main board, a power board and a key board which house the flat panel control logic, brightness control logic and DDC.

The power board will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.

Monitor Block Diagram



3. Operating Instructions

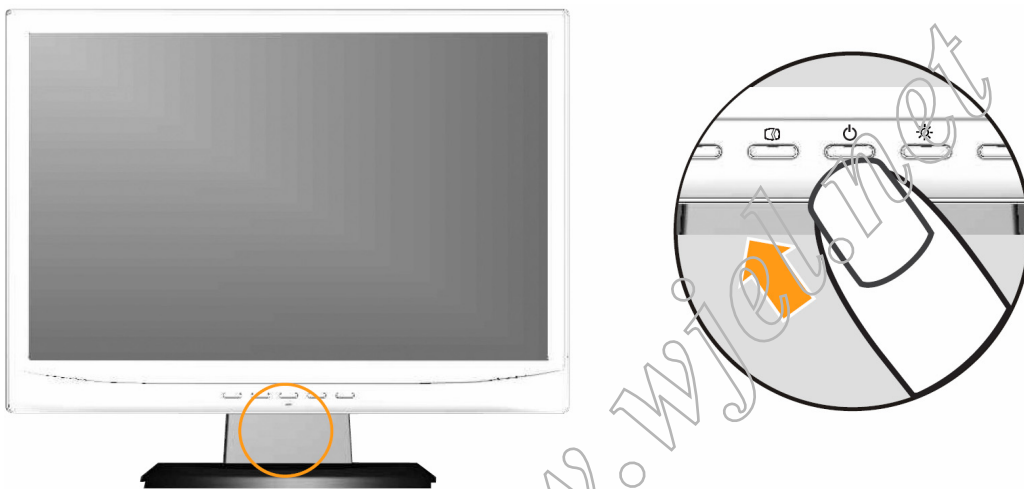
3.1 General Instructions

Press the power button to turn the monitor on or off. The control buttons are located on the right side of the monitor.

By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor, the power indicator will light up.

3.2 Control Buttons

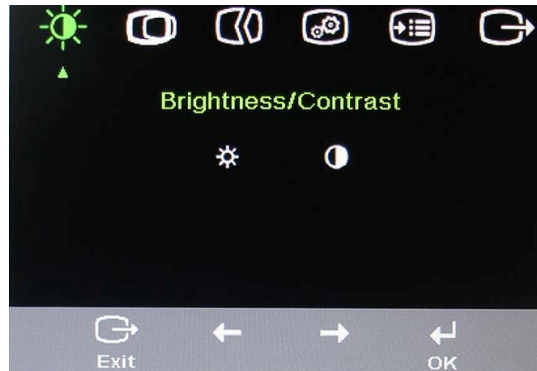


Icon	Control	Description
	Image Setup	Activates automatic image adjustment.
	Brightness	Direct access to Brightness adjustment.












To use the controls:




1. Press to open the main OSD menu.
2. Use or to move among the icons. Select an icon and press to access that function. If there is a sub-menu, you can move between options using or , then press to select that function. Use or to make adjustments. Press to save.
3. Press to move backwards through the sub-menus and exit from the OSD.
4. Press and hold for 10 seconds to lock the OSD. This will prevent accidental adjustments to the OSD. Press and hold for 10 seconds to unlock the OSD and allow adjustments to the OSD.
5. Enables DDC/CI by default. Use OSD Exit key, Press and hold the buttons for 10 seconds to disable / enable DDC/CI function. The words “DDC/CI disabled” shows on the screen.






3.3 Adjusting the Picture



OSD functions

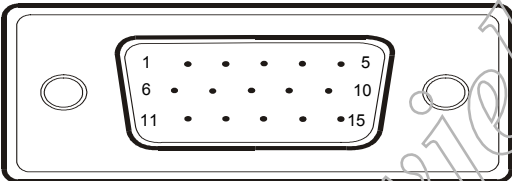
OSD Icon on Main Menu	Submenu	Description
 Brightness/Contrast	 Brightness	Adjusts overall brightness
	 Contrast	Adjusts difference between light and dark areas
 Image Position	 Horizontal Position	Moves the image left or right.
	 Vertical Position	Moves the image up or down.
 Image Setup	 Automatic	Automatically optimizes the image.
	 Manual	Manually optimizes the image. See "Manual image setup" on page 3-3. <ul style="list-style-type: none"> • Clock • Phase • Save
 Image Properties	 Color	Adjusts intensity of red, green, and blue.
	Preset mode	<ul style="list-style-type: none"> • Default • Reddish • Bluish • sRGB
	Custom	<ul style="list-style-type: none"> • Red: Increases or decreases the saturation of 'red' in the image. • Green: Increases or decreases the saturation of 'green' in the image. • Blue: Increases or decreases the saturation of 'blue' in the image. • Save: Saves the custom color choices.

 Options	 Information	Shows resolution, refresh rate, and product details. Note: This screen does not allow any changes to the settings.
	 Language	This section lists the languages supported by your monitor. Note: The language chosen only affects the language of the OSD. It has no effect on any software running on the computer.

OSD Icon on Main Menu	Submenu	Description
 Options	 Menu Position	Menu position adjusts menu location on the screen.
	Default	Default returns the menu position to the default settings.
	Custom	<ul style="list-style-type: none"> Horizontal: Changes the horizontal position of the OSD. Vertical: Changes the vertical position of the OSD. Save
	 Factory Reset	<ul style="list-style-type: none"> Cancel Reset Resets monitor to the original factory settings.
	Accessibility	Controls button and menu settings for accessibility preferences.  Button repeat rate: Select ← or → to change. <ul style="list-style-type: none"> Off Default Slow  Menu time out: Sets the length of time the OSD will remain active after the last time a button is pressed.

4. Input/Output Specification

4.1 Input Signal Connector

Pin No.	Description	Pin No.	Description
1.	Red Input	9.	+5VDC
2.	Green Input	10.	Connection detect
3.	Blue Input	11.	GND
4.	GND	12.	SDA
5.	GND	13.	H Sync
6.	Red GND	14.	V Sync
7.	Green GND	15.	SCL
8.	Blue GND		
VGA connector layout			
			

4.2. Factory Preset Display Modes

TIMING	FH(KHZ) FV(HZ)	TOTAL (DOT/LINE)	ACTIVE (DOT/LINE)	SYNC WIDTH (DOT/LINE)	FRONT PORCH (DOT/LINE)	BACK PORCH (DOT/LINE)	PIXEL FOREQ (MHZ)
NTSC VGA@ 60Hz	31.469	800	640	96	16	48	25.175
	59.940	525	480	2	10	33	
PAL VGA@50Hz	31.25	884	700	72	5	107	27.625
	50Hz	625	570	2	12	41	
640x480 @60Hz	31.469	800	640	96	16	48	25.175
	59.94	525	480	2	10	33	
640x480 @66Hz	35.00	864	640	64	64	96	30.24
	66.67	525	480	3	3	39	
640x480 @72Hz	37.861	832	640	40	24	128	31.5
	72.809	520	480	3	9	28	
640x480 @75Hz	37.5	840	640	64	16	120	31.5
	75	500	480	3	1	16	
800x600 @56Hz	35.156	1024	800	72	24	128	36
	56.25	625	600	2	1	22	
800x600 @60Hz	37.879	1056	800	128	40	88	40
	60.317	628	600	4	1	23	
800x600 @72Hz	48.077	1040	800	120	56	64	50
	72.188	666	600	6	37	23	
800x600 @75Hz	46.875	1056	800	80	16	160	49.5
	75	625	600	3	1	21	
832x624 @75Hz	48.943	1088	832	80	48	128	53.25
	75	654	624	4	3	23	
1024x768 @60Hz	48.363	1344	1024	136	24	160	65
	60.004	806	768	6	3	29	
1024x768 @70Hz	56.476	1328	1024	136	24	144	75
	70.069	806	768	6	3	29	
1024x768 @75Hz	60.023	1312	1024	96	16	176	78.75
	75.029	800	768	3	1	28	
1152x864 @75Hz	67.708	1536	1152	120	72	192	104
	75	905	864	4	3	34	
1280x1024 @60Hz	63.981	1688	1280	112	48	248	108
	60.020	1066	1024	3	1	38	
1280x1024 @70Hz	74.882	1696	1280	160	32	224	127
	69.853	1072	1024	4	2	42	
1280x1024 @75Hz	79.976	1688	1280	144	16	248	135
	75.025	1066	1024	3	1	38	
1440x900 @60Hz	55.935	1904	1440	152	80	232	106.5
	59.887	934	900	6	3	25	
1440x900 @60Hz	55.469	1600	1440	32	48	80	
	59.901	926	900	6	3	17	88.75
1440x900 @75Hz	70.635	1936	1440	152	96	248	136.75
	74.984	942	900	6	3	33	

4.3 Panel Specification

4.3.1 General Characteristics

HannStar Display model HSD170MGW1-A is a color active matrix thin film transistor (TFT) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching device. This model is composed of a TFT LCD panel, a driving circuit and a back light system. This TFT LCD has a 17.0 inch diagonally measured active display area with XGA resolution (900 vertical by 1440 horizontal pixel array) and can display up to 262,144 colors.

4.3.2 Features

- _ 17.0 WXGA+ for Monitor application
- _ High Resolution: 1440*900
- _ 2-ch LVDS interface system
- _ Input timing: DE mode
- _ Wide Viewing Angle
- _ RoHS compliance

4.3.3 Display Characteristics

Item		Specification	Unit
Outline Dimension		389.2 x 254.5 x 11.5 (Typ)	mm
Display area		367.2 (H) x 229.5 (V)	mm
Number of Pixel		1440(H) x 900(V)	pixels
Pixel pitch		0.255(H) x 0.255(V)	mm
Pixel arrangement		RGB Vertical stripe	
Display color		6 Bits / 262,144	colors
Display mode		Normally white	
Surface treatment		Antiglare (3H)	
Weight		1370	g
Back-light		2-CCFLs, Top & bottom edge side	
Input signal		2-ch LVDS	
Power Consumption	Logic System	2.4	W
	B/L System	9.8	W

4.3.4 Optical Characteristics

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Contrast		CR	Θ=0 view angle	350	500	-	
Response time	Rising	T _R		-	3	5	msec
	Falling	T _F		-	5	7	
White luminance (Center)		Y _L		200	250	-	cd/m ²
		Y _L		(180)	(230)	-	cd/m ²
Color chromaticity (CIE1931)	Red	R _x		0.595	0.625	0.655	
		R _y		0.315	0.345	0.375	
	Green	G _x		0.295	0.325	0.355	
		G _y		0.525	0.555	0.585	
	Blue	B _x		0.125	0.155	0.185	
		B _y		0.115	0.145	0.175	
	White	W _x		0.280	0.310	0.340	
		W _y		0.300	0.330	0.360	
Viewing angle	Hor.	Θ _L	CR>10	65	70	-	
		Θ _R		65	70	-	
	Ver.	Θ _U		60	65	-	
		Θ _D		60	65	-	
Viewing angle	Hor.	Θ _L	CR>5	75	80	-	
		Θ _R		75	80		
	Ver.	Θ _U		75	80	-	
		Θ _D		75	80	-	
Brightness uniformity		B _{UNI}	Θ=0	70	75	-	%

4.3.5 Parameter guide line for CCFL Inverter

TFT LCD Module:

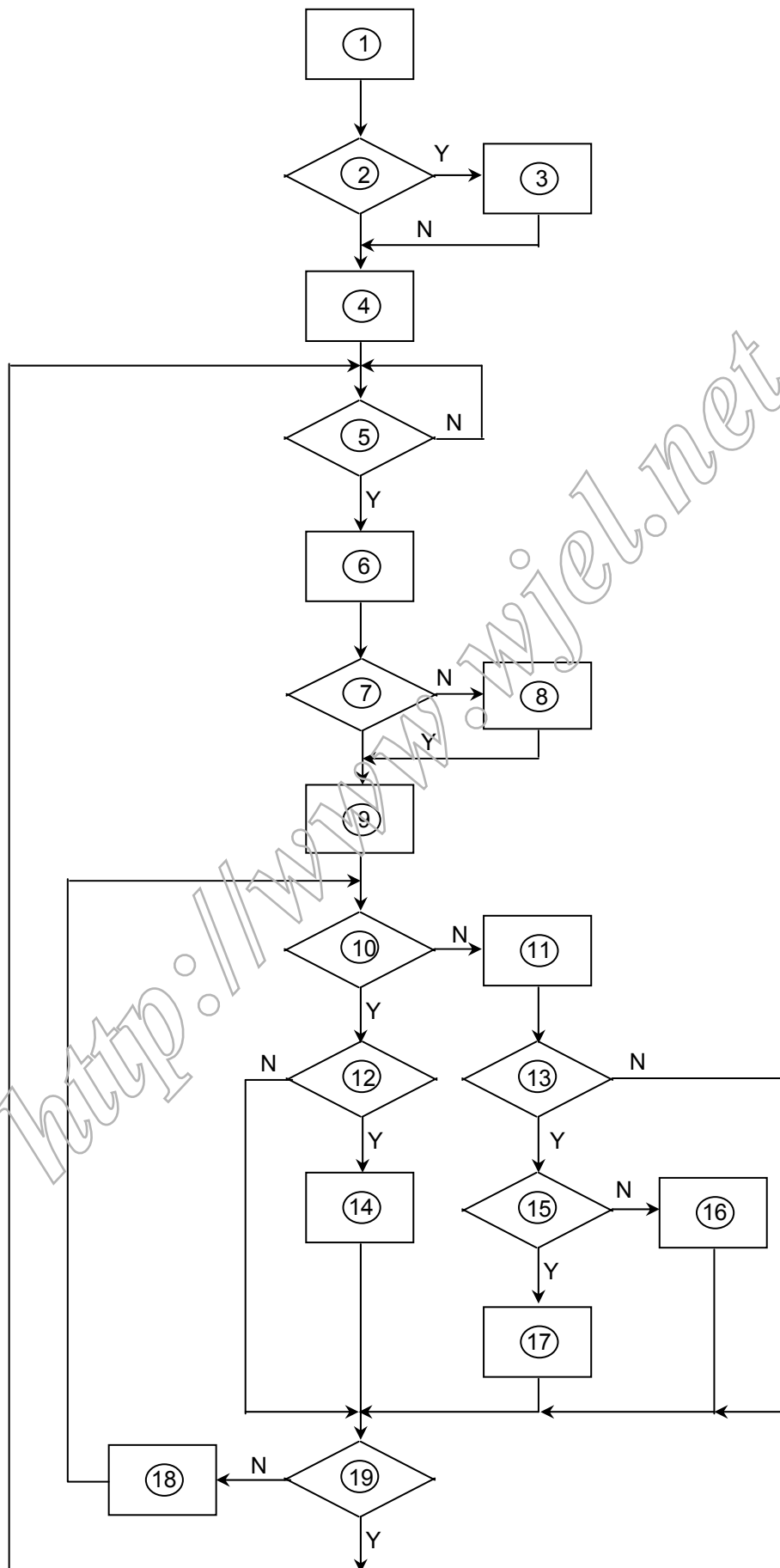
Item		Symbol	Min.	Typ.	Max.	Unit
Voltage of power supply		V _{DD}	4.5	5.0	5.5	V
Current of power supply	White	I _{DD0}	260	360	460	mA
	V-Color	I _{DD1}	370	470	570	mA
	Mosaic	I _{DD2}	515	615	715	mA
Vsync frequency		f _V	60	60	75	Hz
Hsync frequency		f _H	55.469	55.935	70.635	KHz
Frequency		f _{DCLK}	44.375	53.25	68.375	MHz
Input rush current		I _{Rush}	-	-	1.5	A

Back Light Unit:

Item	Symbol	Min.	Typ.	Max.	Unit
Lamp current	IL	3.0	8.0	9.0	mA(rms)
Lamp voltage	VL	-	610	-	V(rms)
Frequency	fL	30	-	80	KHz
Operating lamp life time	Hr	30,000	-	-	Hour
	Hr	40,000	-	-	Hour
Startup voltage	Vs	1200	-	-	V(rms)
		1400			

5. Block Diagram

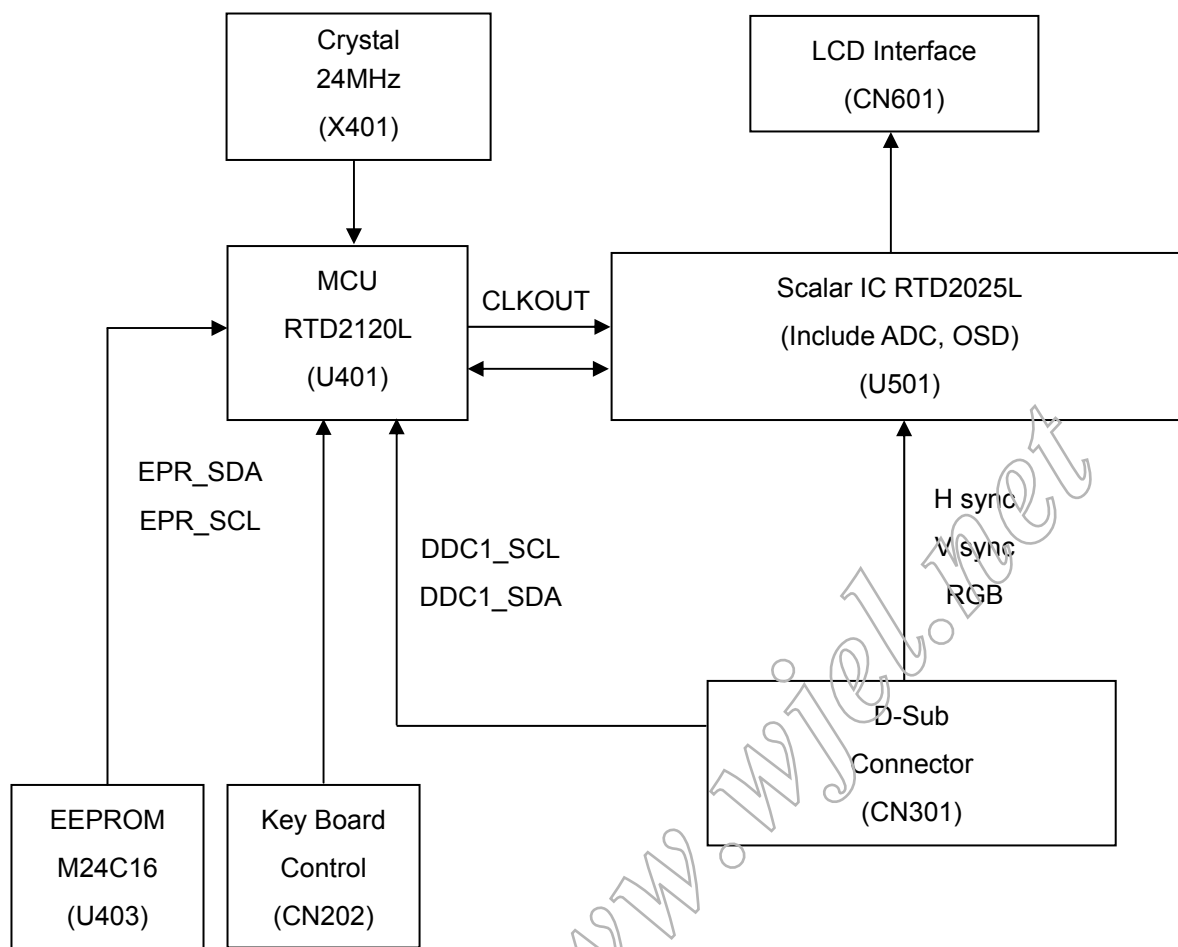
5.1 Software Flow Chat



1) MCU initialize.
2) Is the EPROM blank?
3) Program the EPROM by default values.
4) Get the PWM value of brightness from EPROM.
5) Is the power key pressed?
6) Clear all global flags.
7) Are the AUTO and SELECT keys pressed?
8) Enter factory mode.
9) Save the power key status into EPROM. Turn on the LED and set it to green color. Scalar initializes.
10) In standby mode?
11) Update the lifetime of back light.
12) Check the analog port, are there any signals coming?
13) Does the scalar send out an interrupt request?
14) Wake up the scalar.
15) Are there any signals coming from analog port?
16) Display "No connection Check Signal Cable" message. And go into standby mode after the message disappear.
17) Program the scalar to be able to show the coming mode.
18) Process the OSD display.
19) Read the keyboard. Is the power key pressed?

5.2 Electrical Block Diagram

5.2.1 Main Board

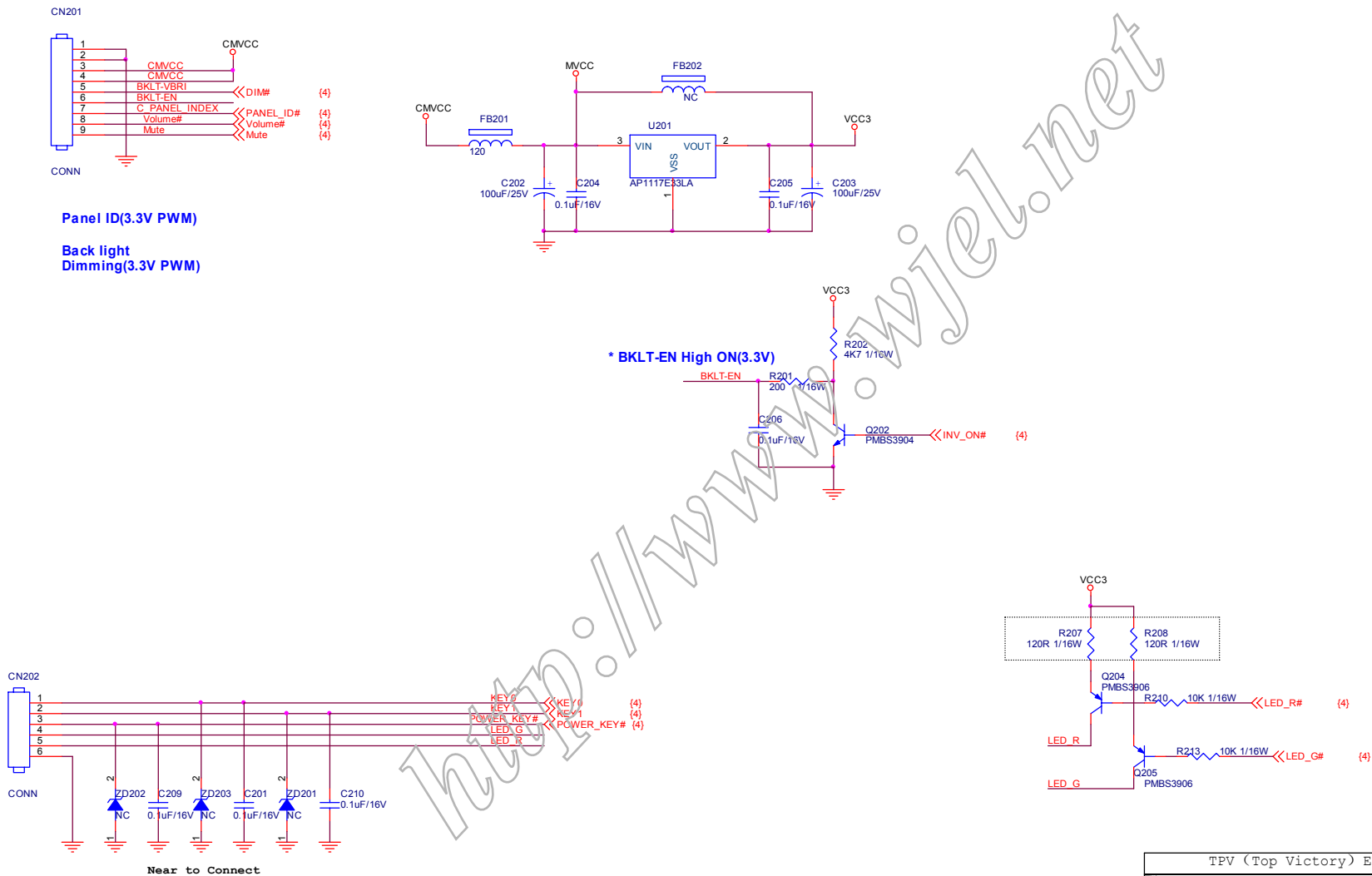


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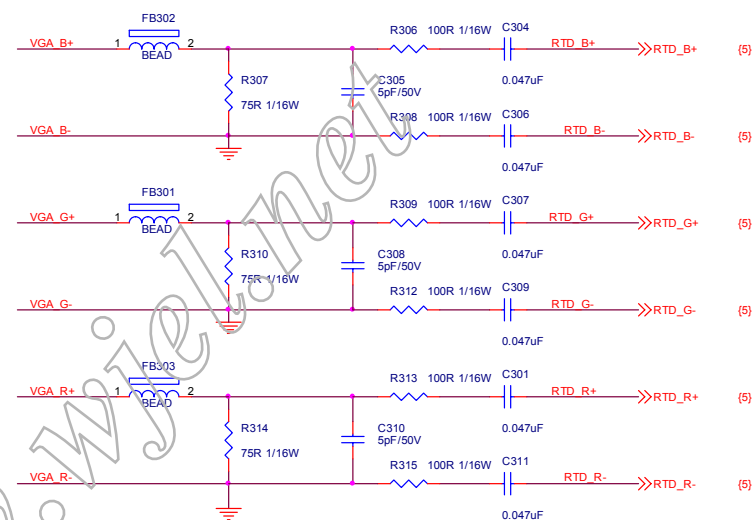
6. Schematic

6.1 Main Board

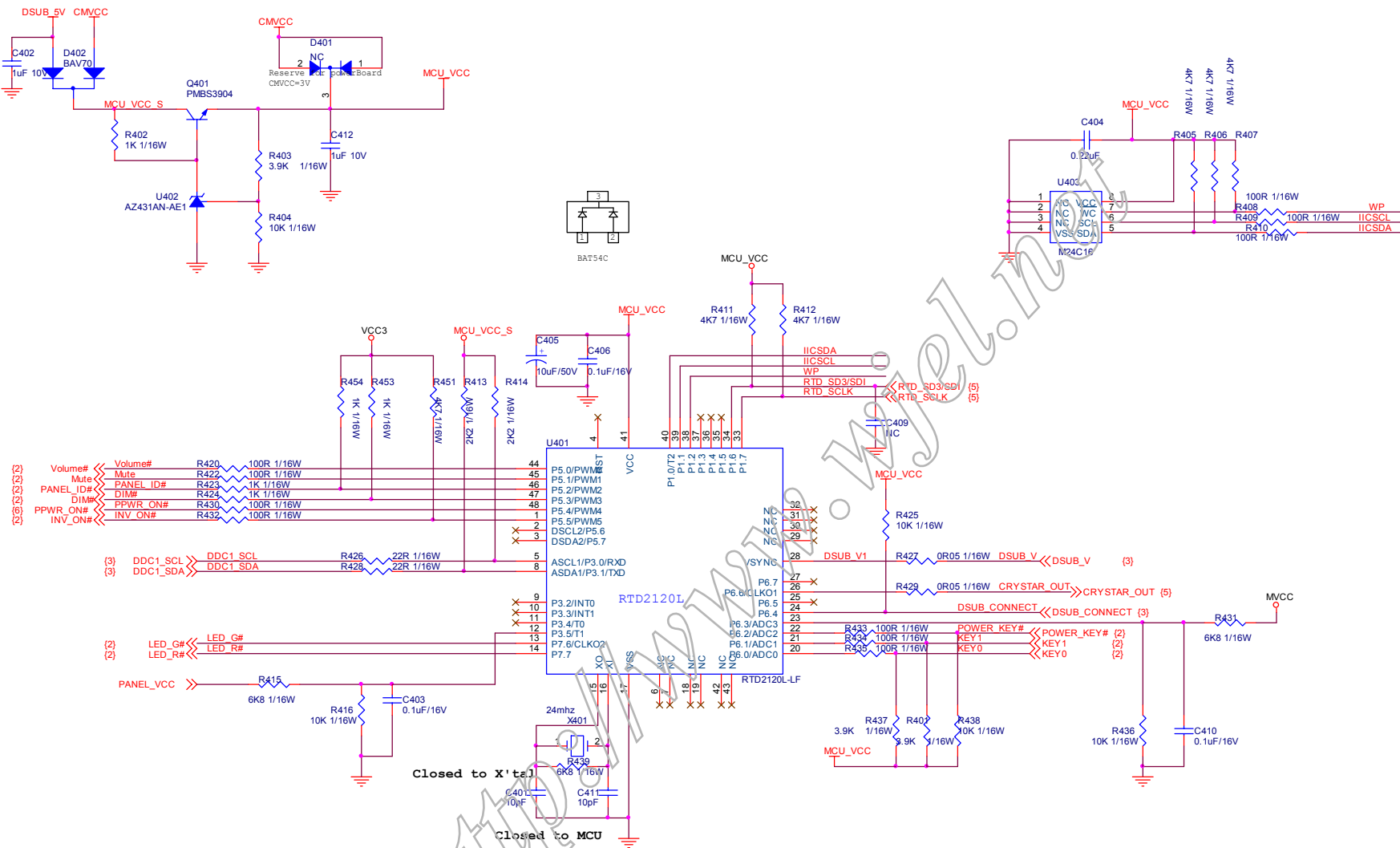
715G2498-1-AO



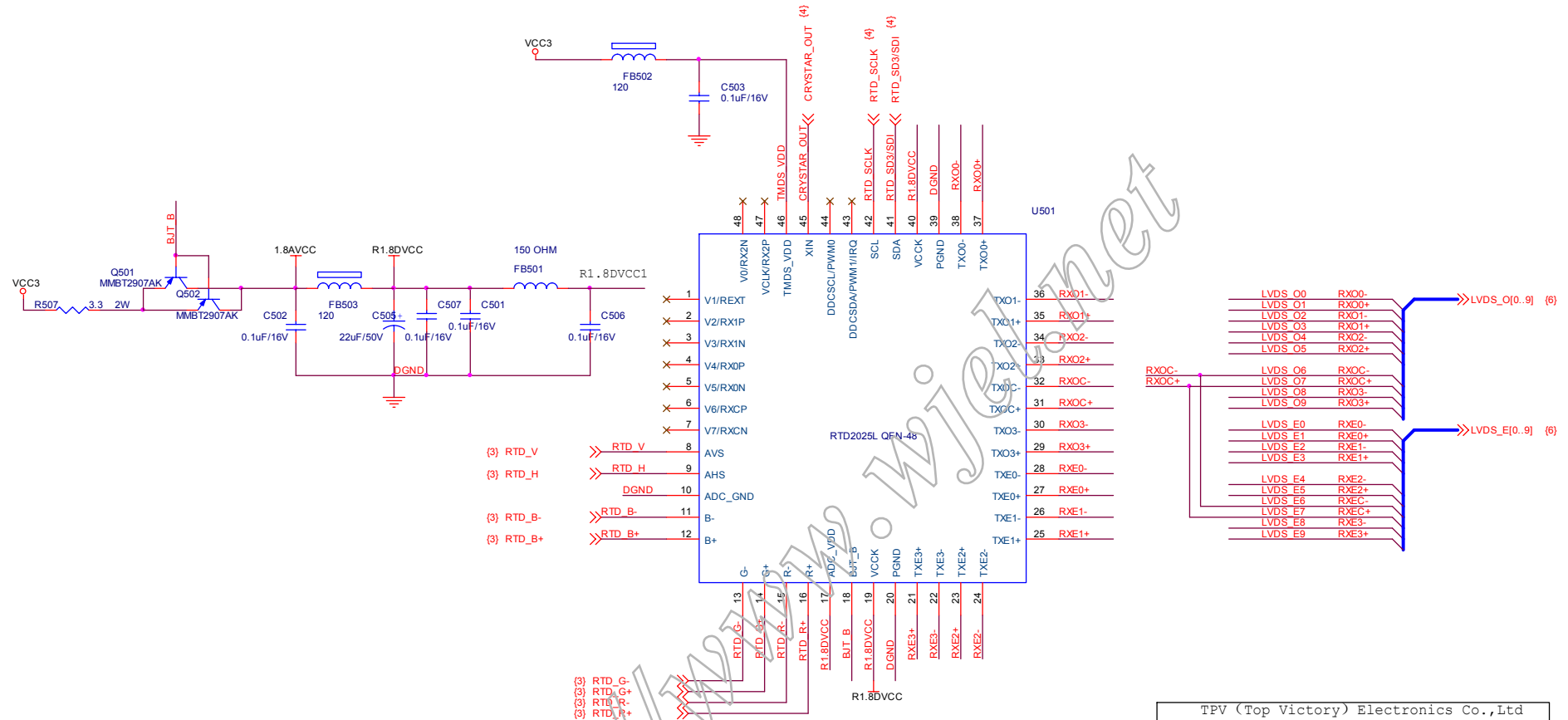
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Title		
02 . POWER		
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Date:	Monday, May 14, 2007	Sheet 2 of 6



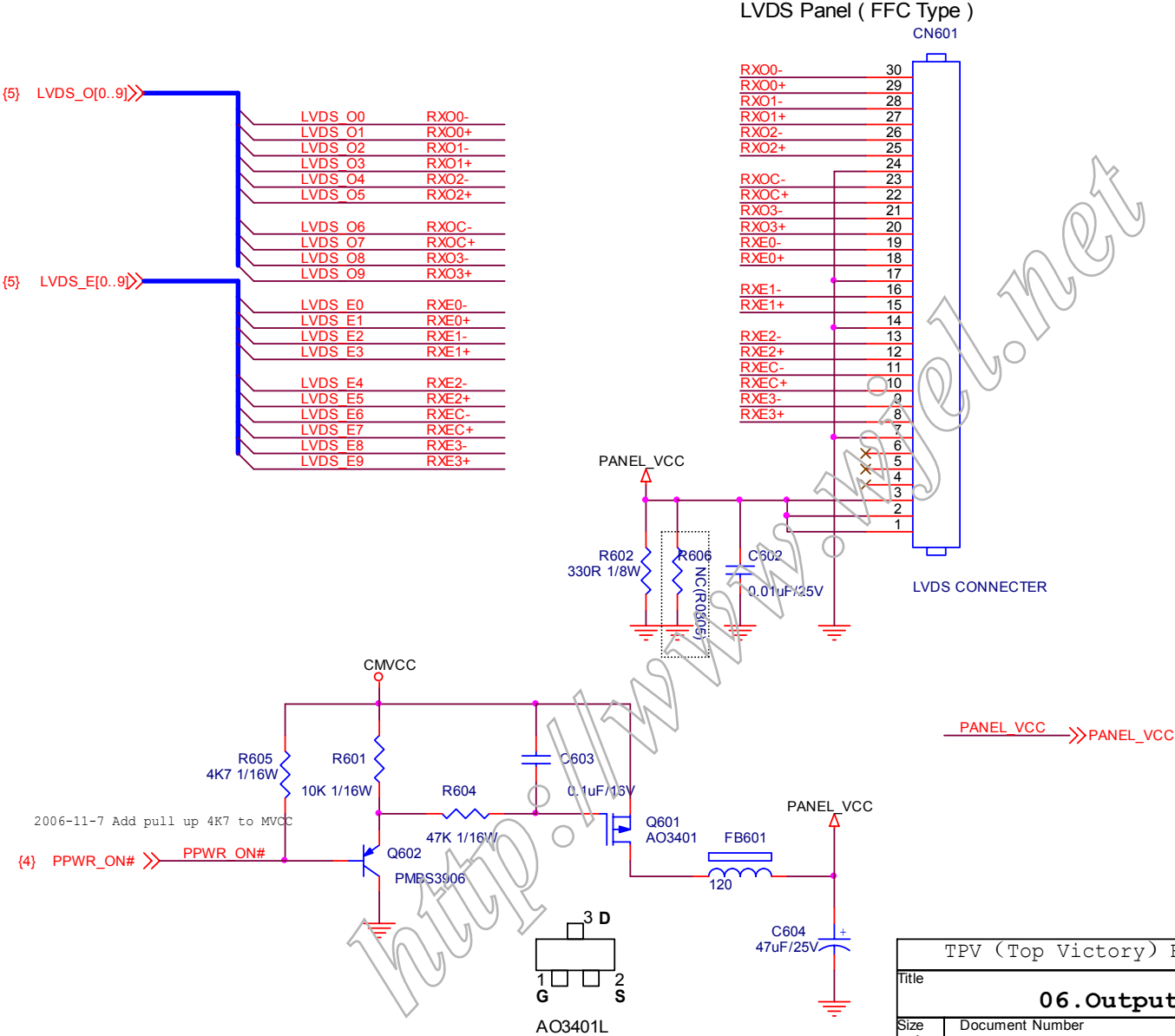
TPV (Top Victory) Electronics Co., Ltd			
Title			
03. Input			
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Date:	Monday, May 14, 2007	Sheet	3 of 6



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Size B	Document Number	Rev
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Date:	Monday, May 14, 2007	Sheet 4 of 6



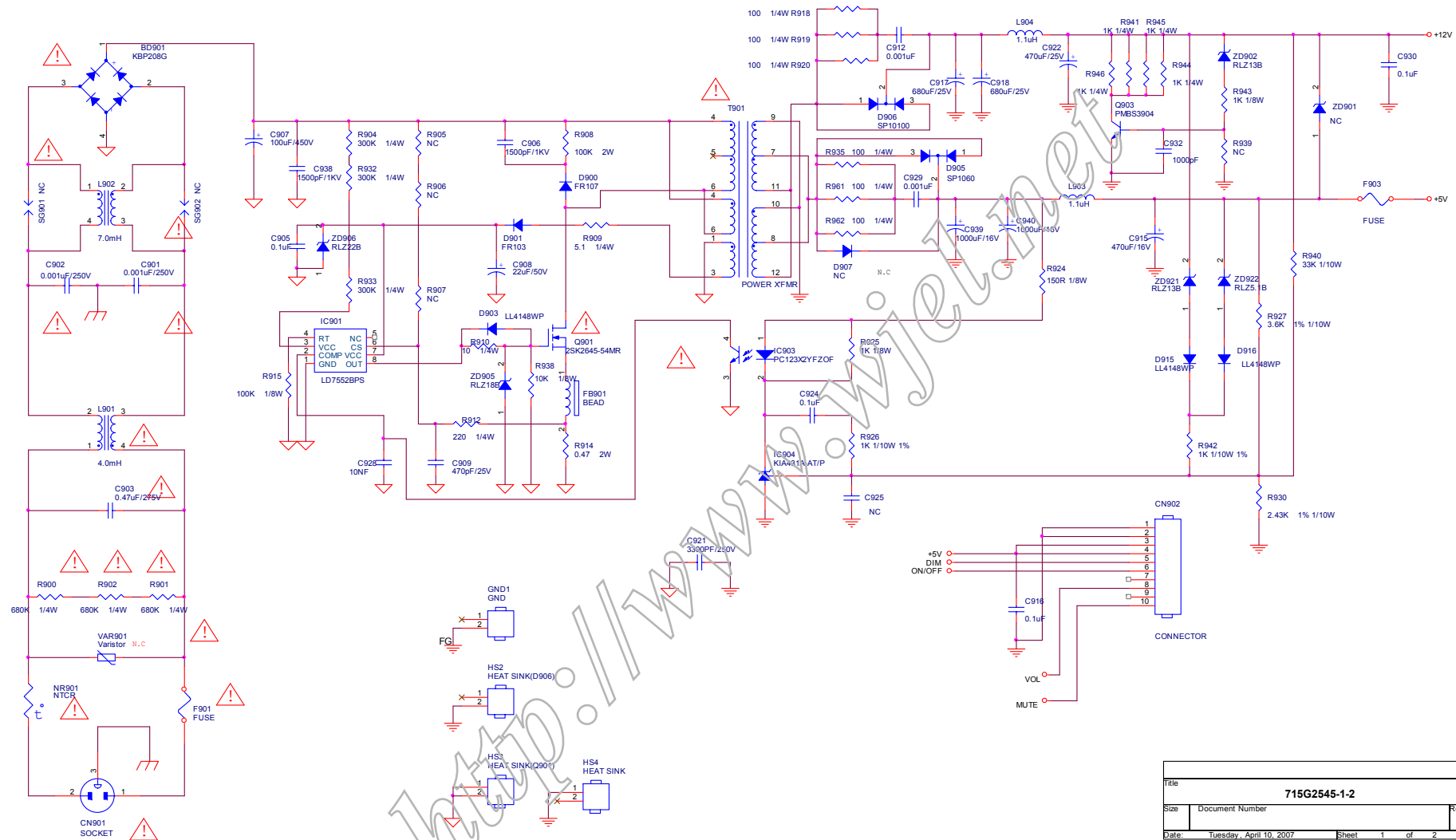
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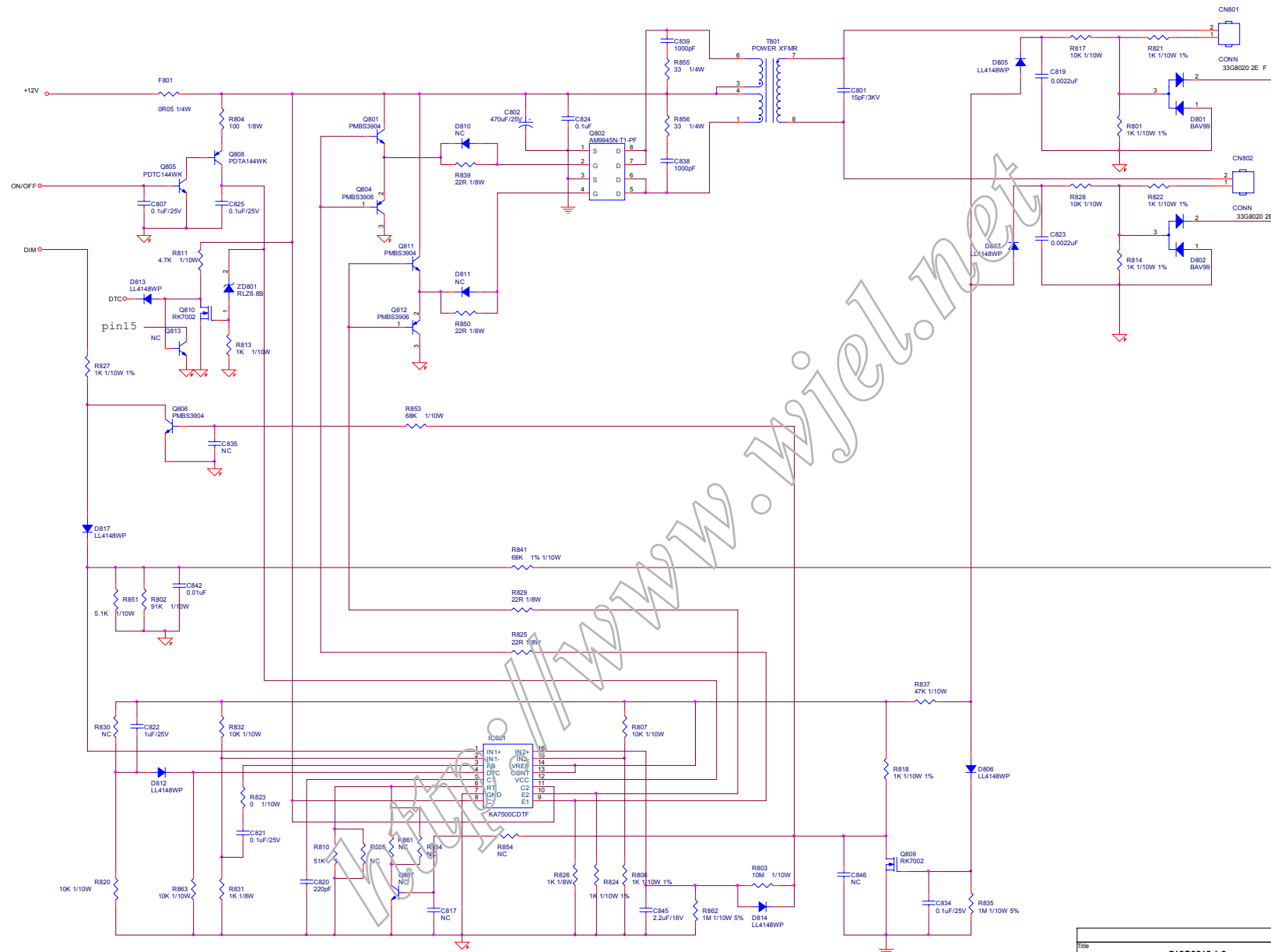
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Title		
06.Output		
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Date:	Monday, May 14, 2007	Sheet 6 of 6

6.2 Power Board

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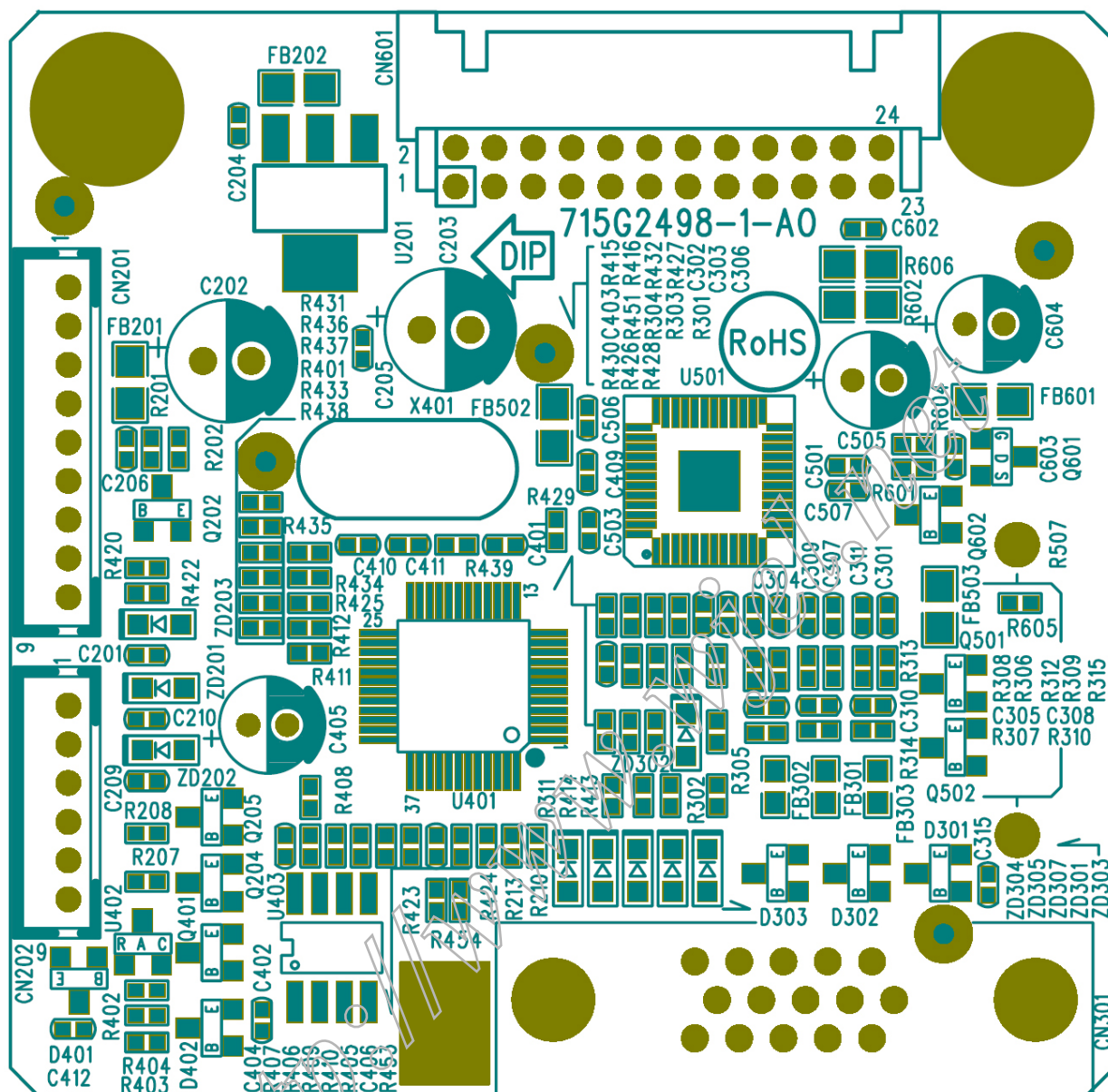
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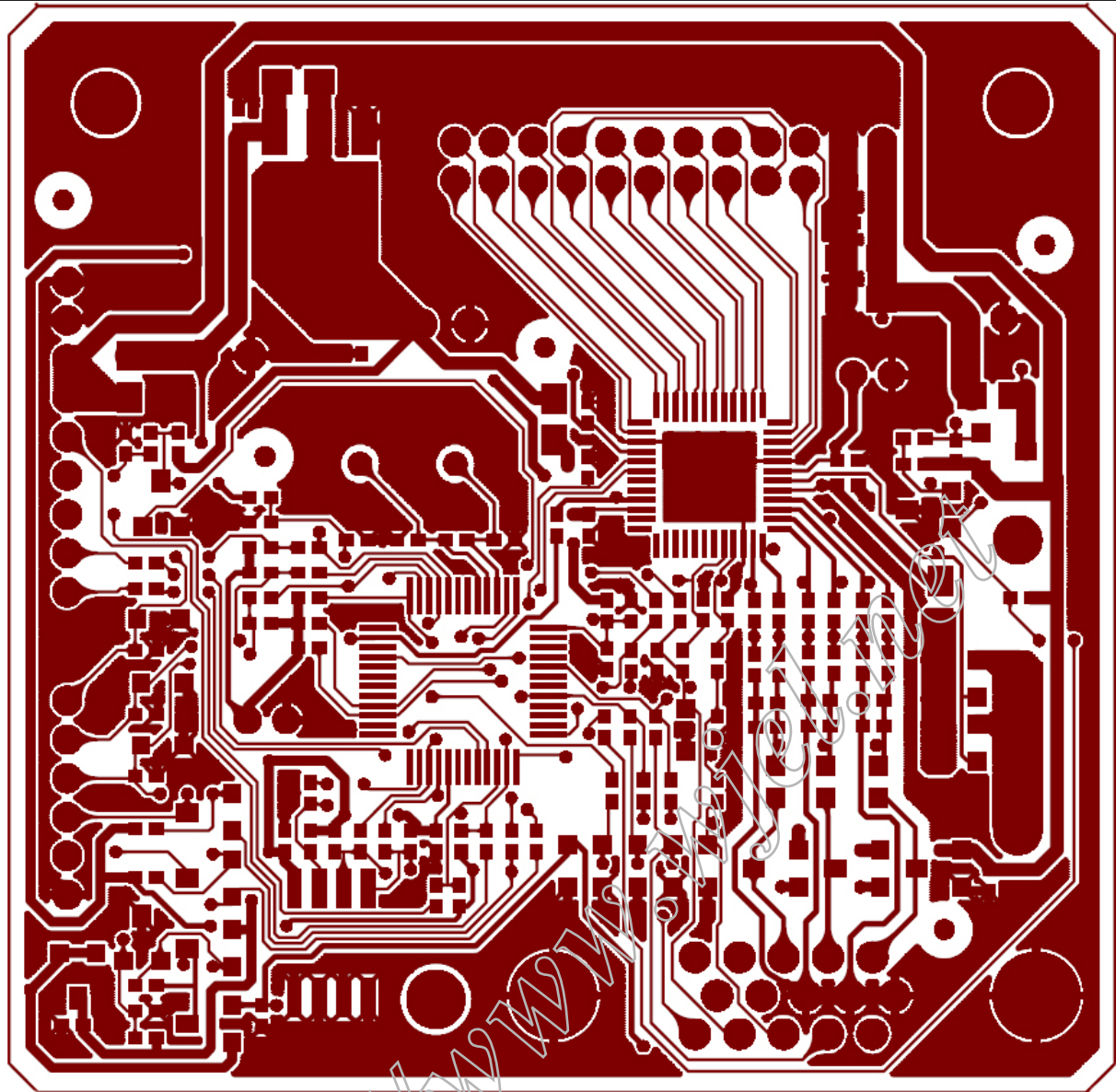


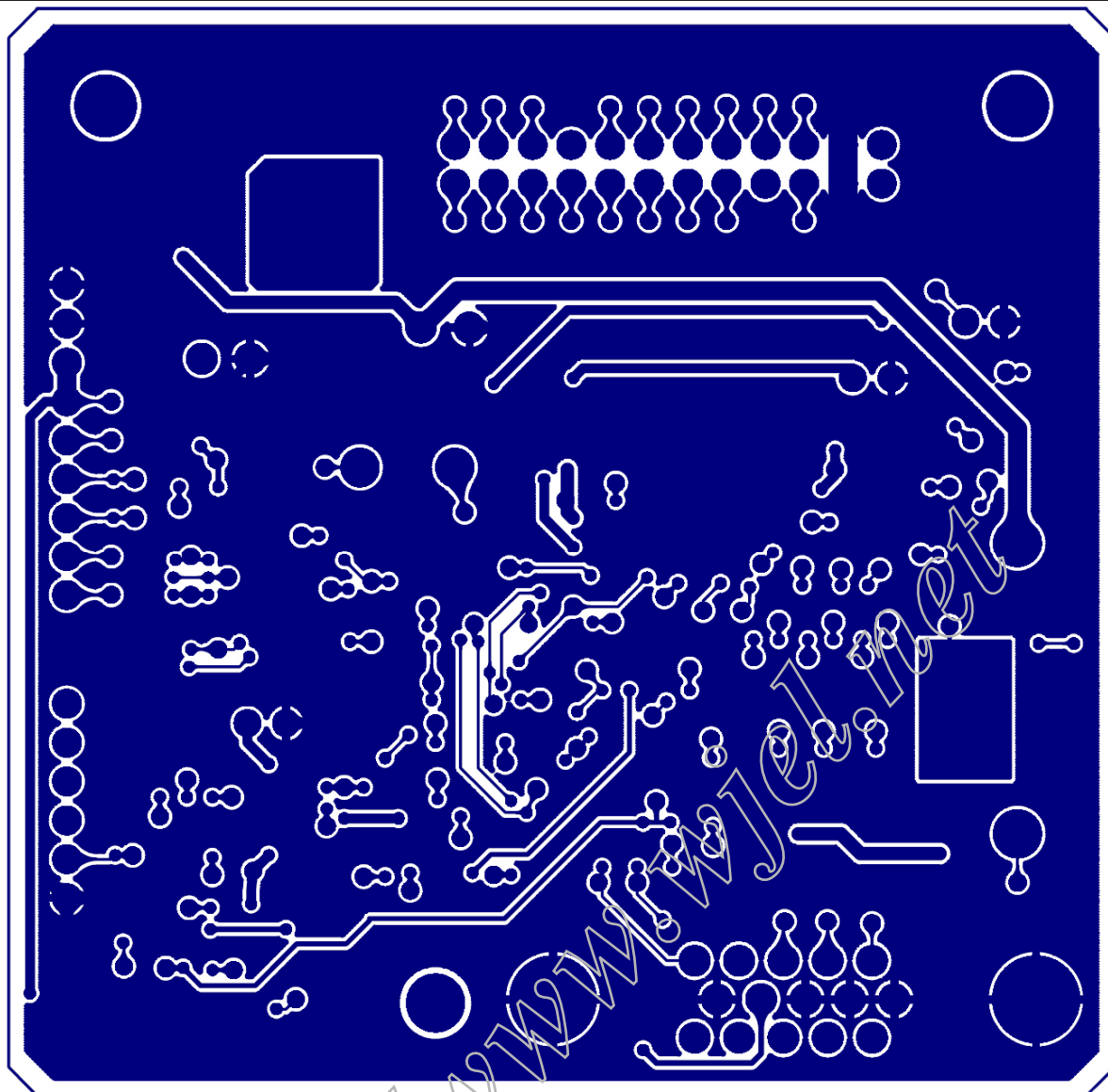
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7.1 Main Board

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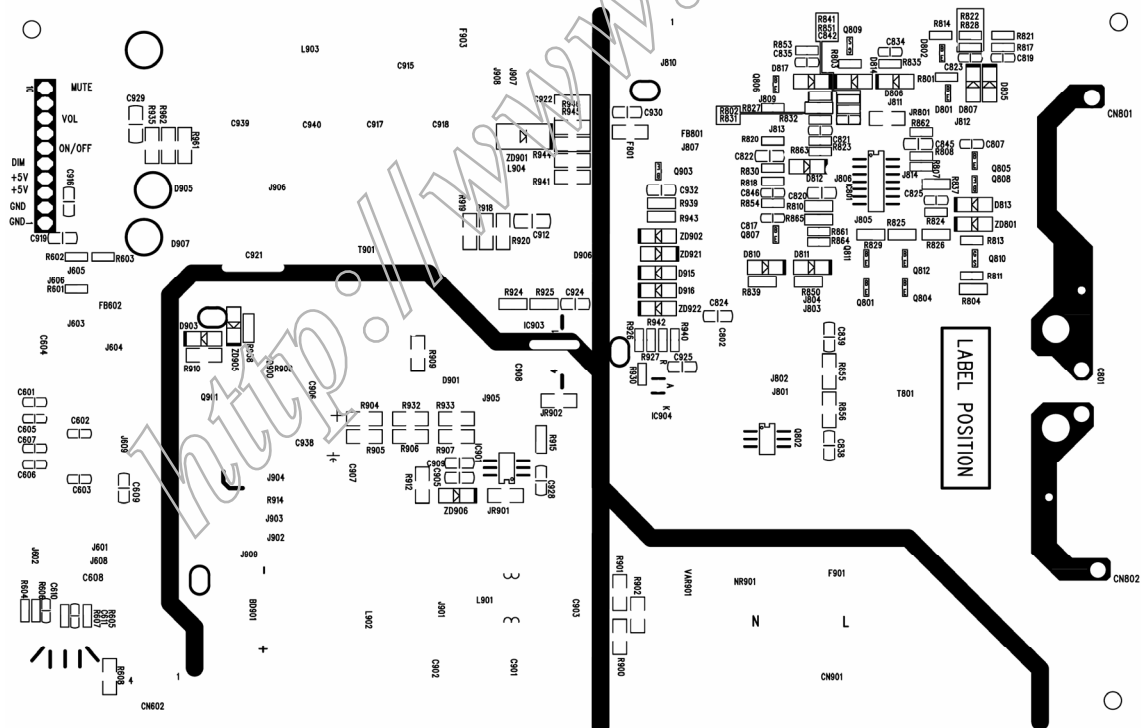
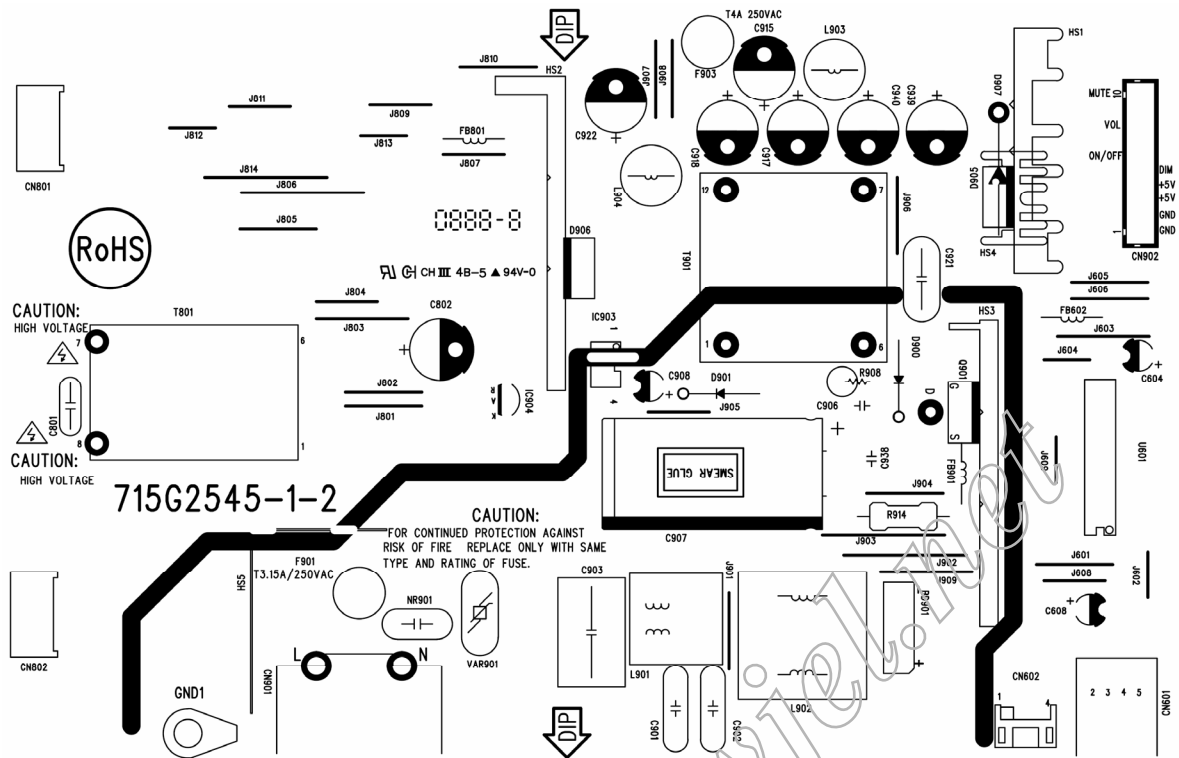


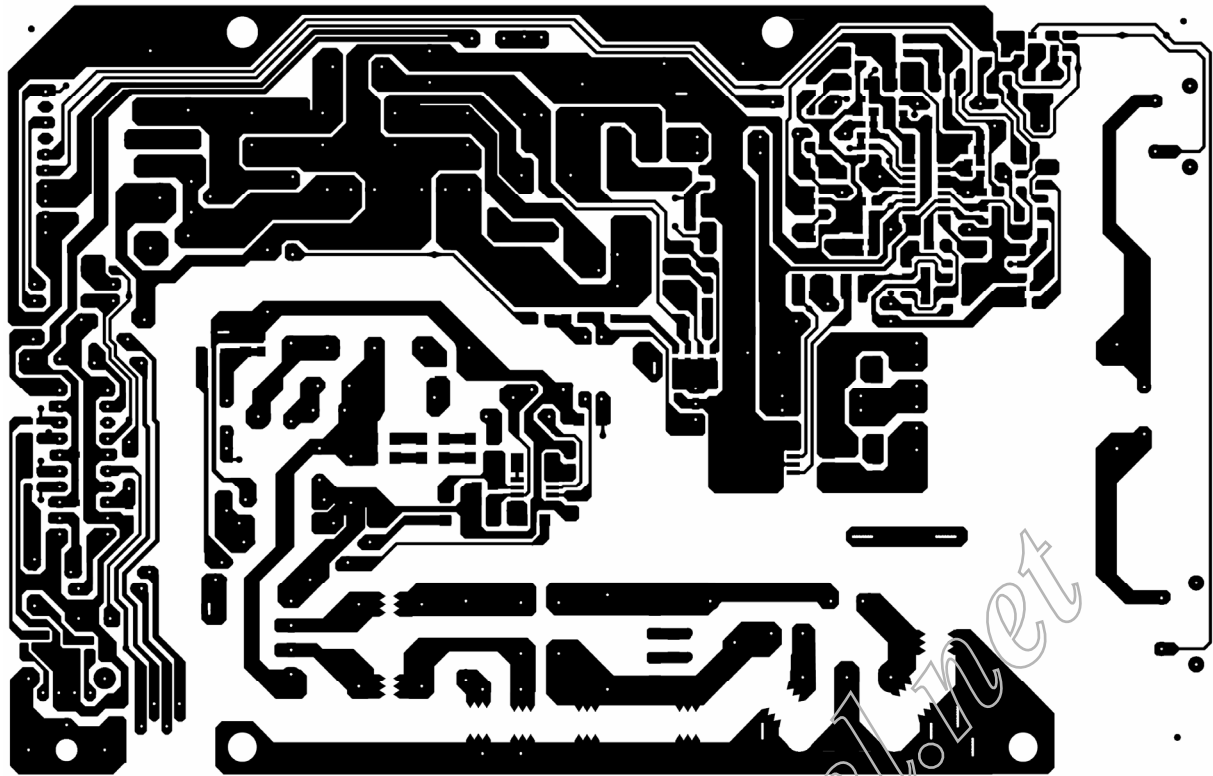




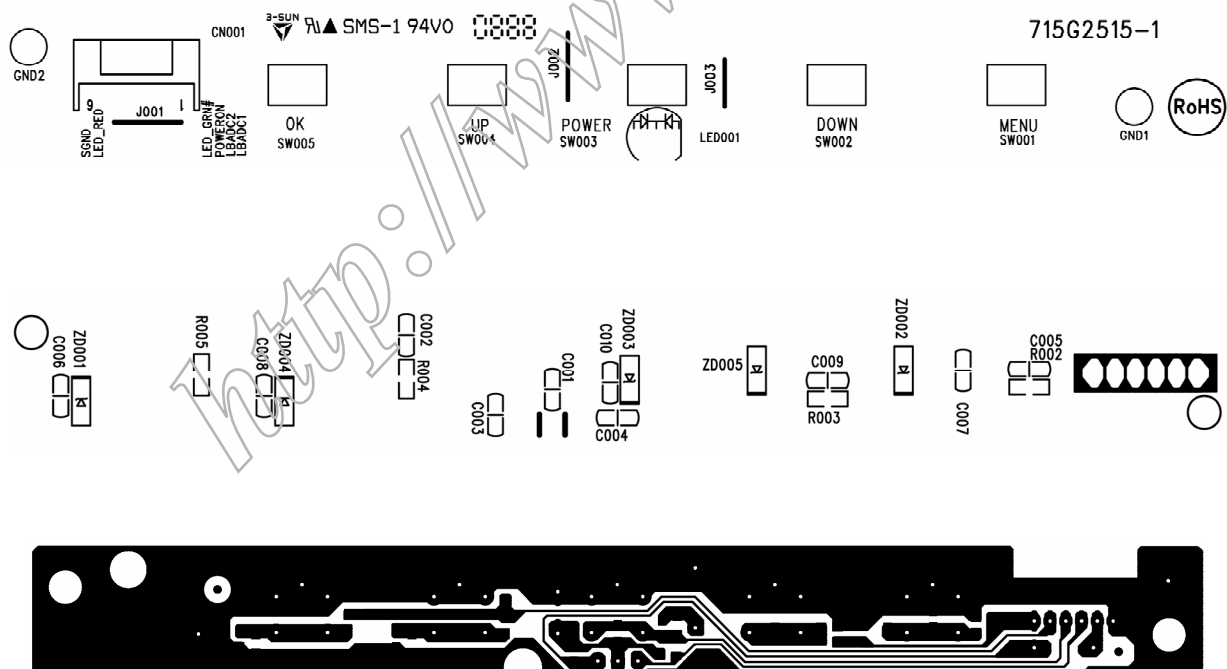
7.2 Power Board

715G2545-1-2





715G2515-1



8. Maintainability

8.1 Equipments and Tools Requirement

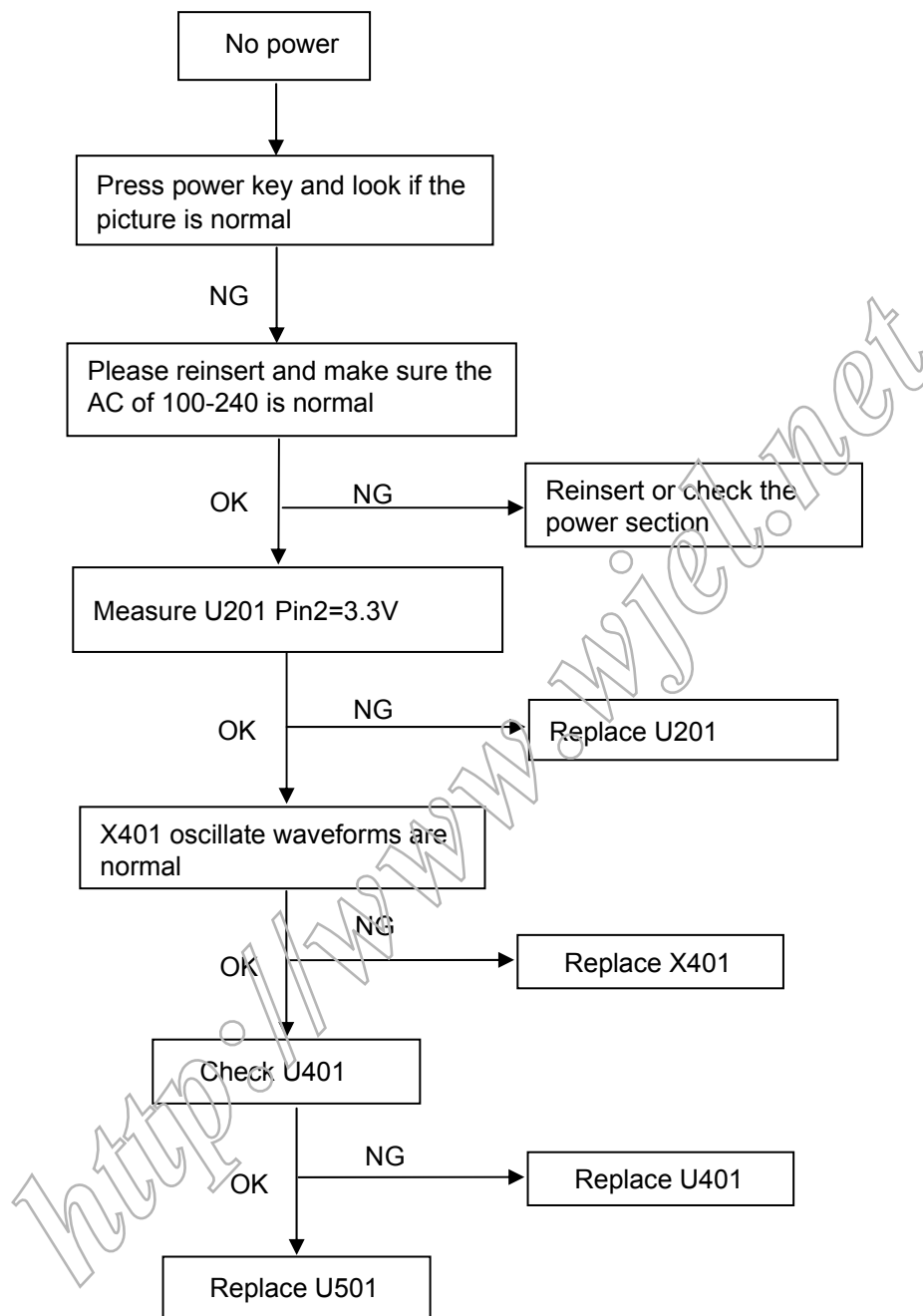
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

<http://www.wjel.net>

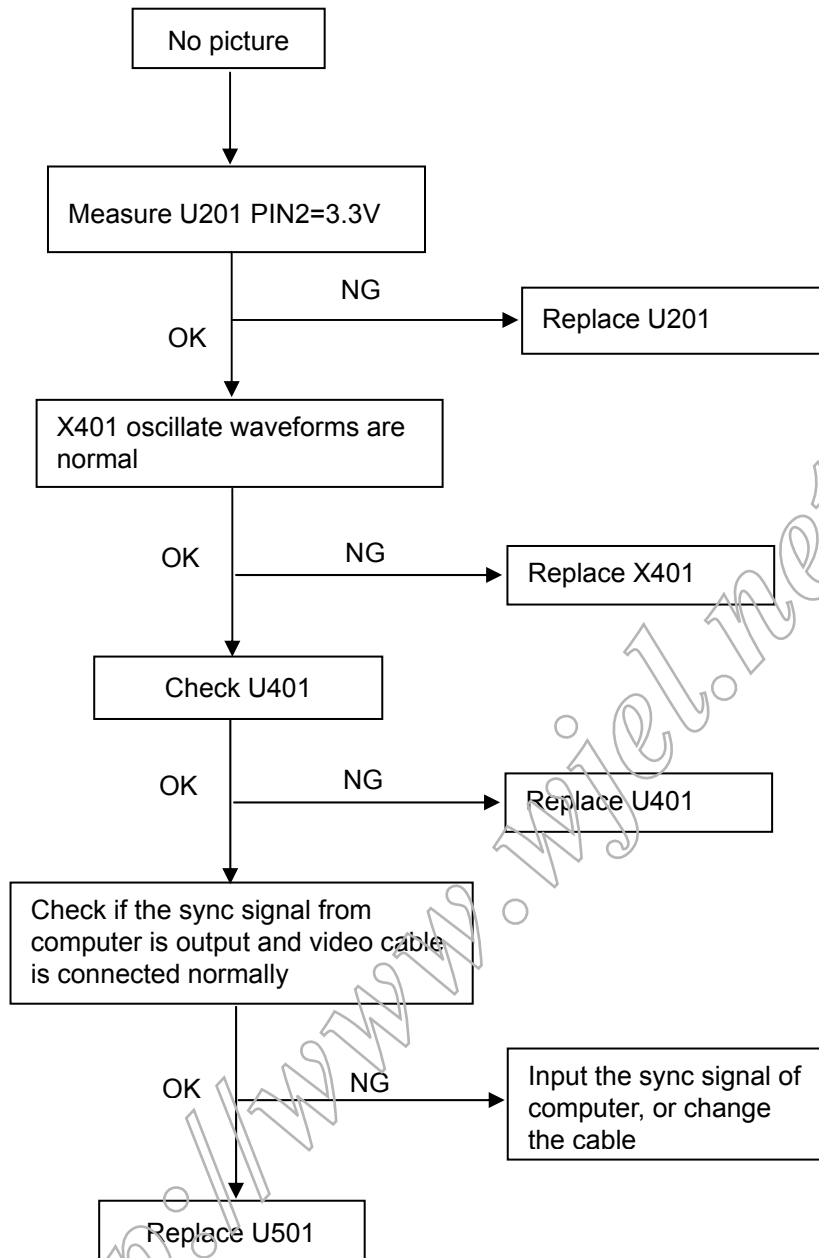
8.2 Trouble Shooting

8.2.1 Main Board

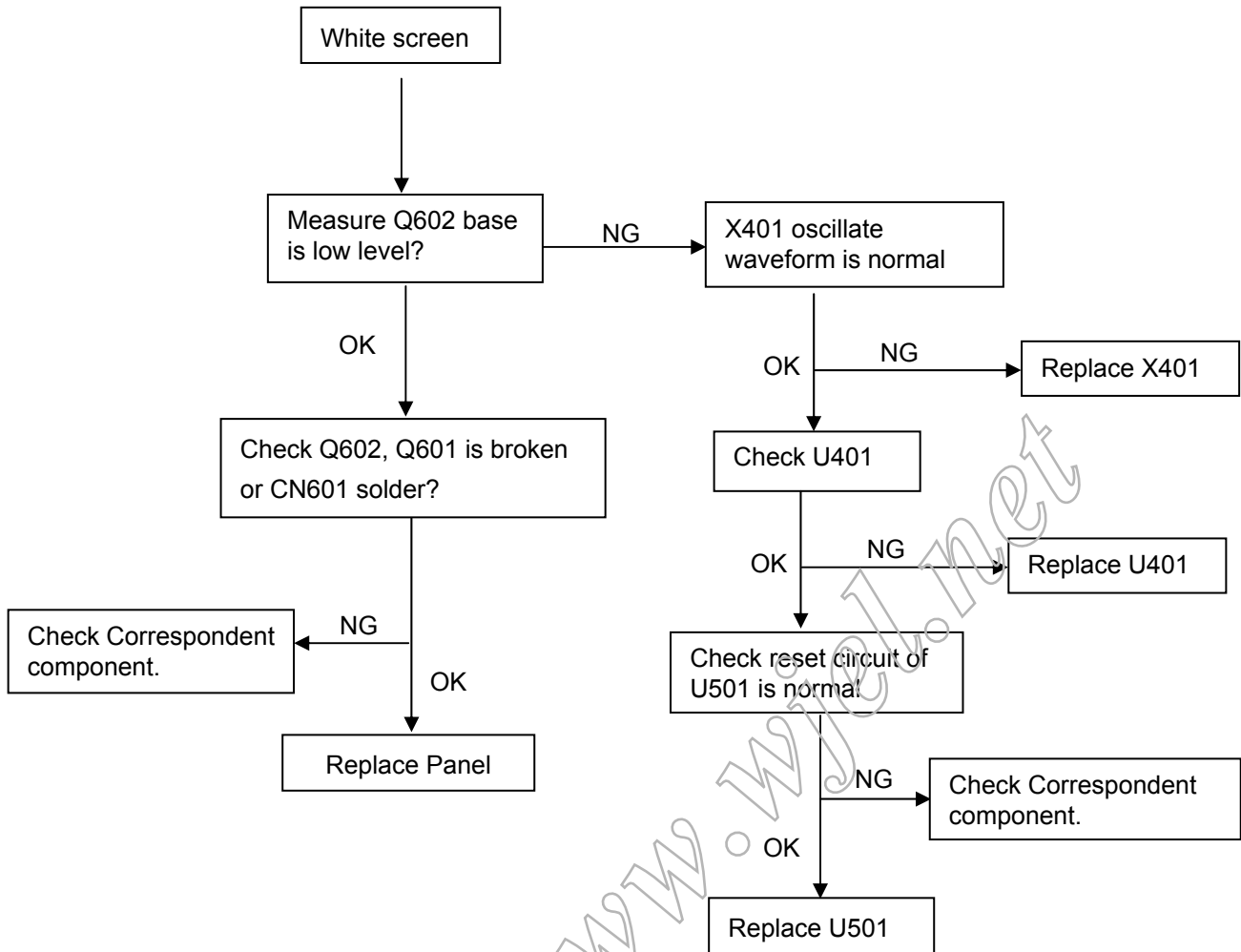
(1) No Power



(2) No picture

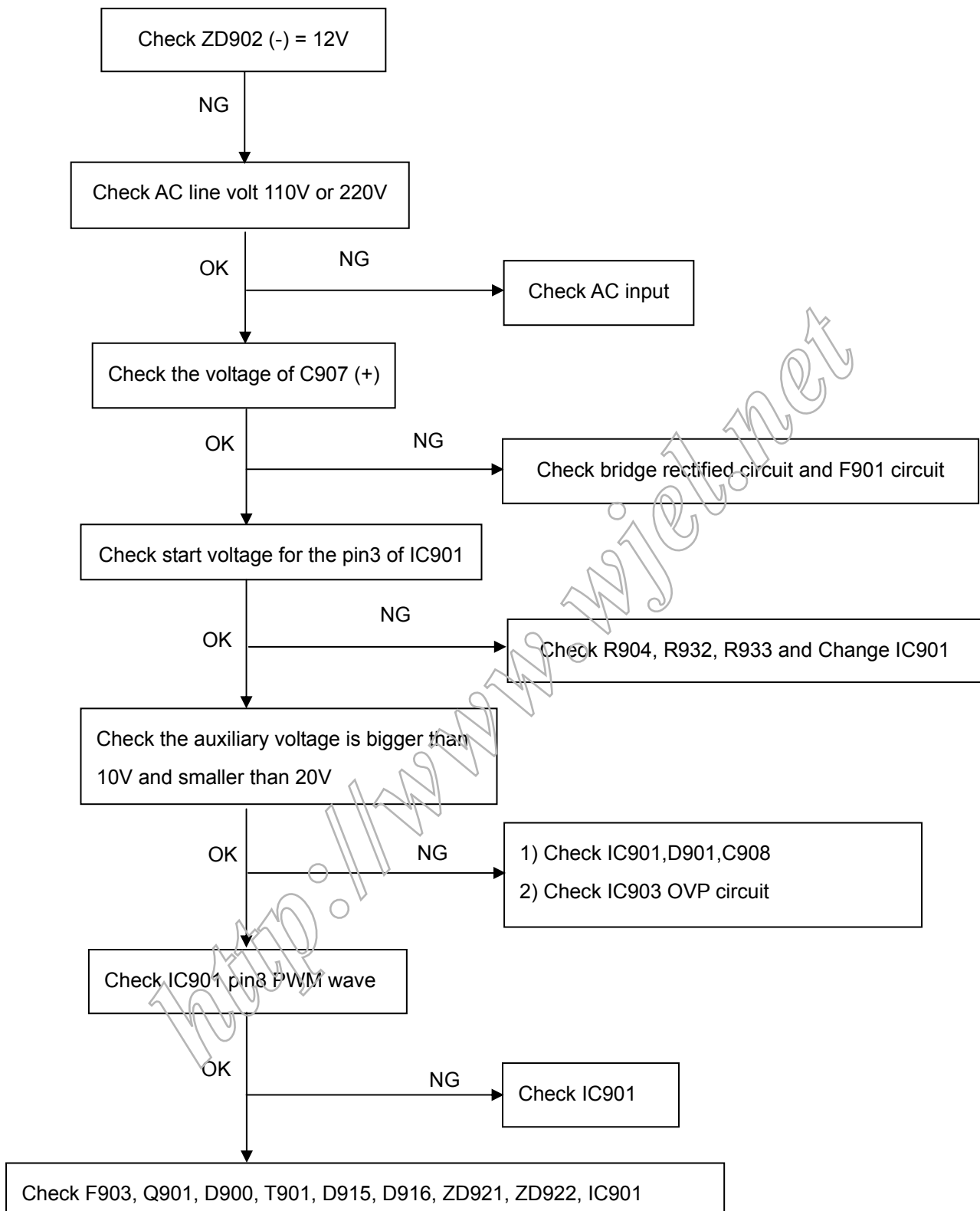


(3) White screen



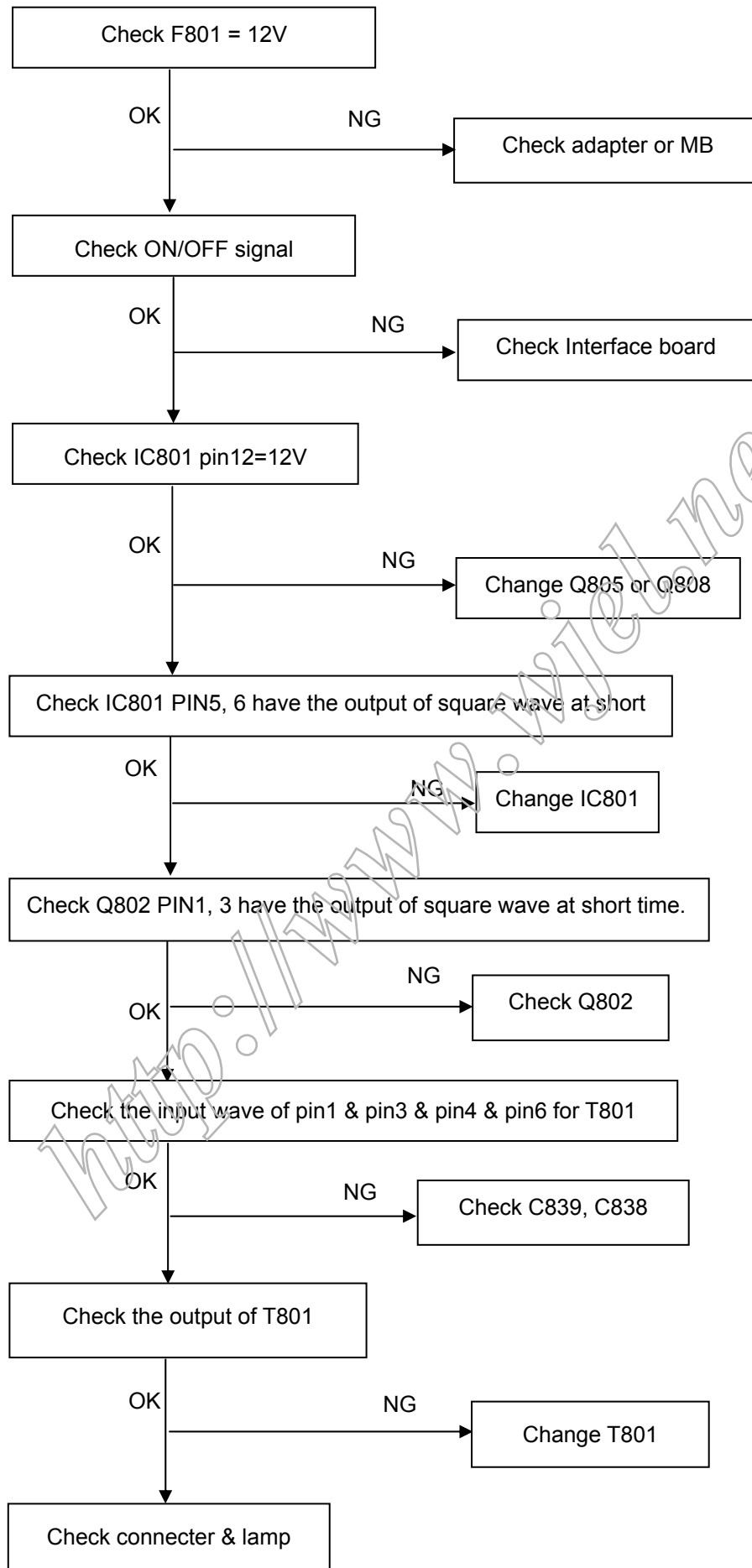
8.2.2 Power/Inverter Board

(1) No power

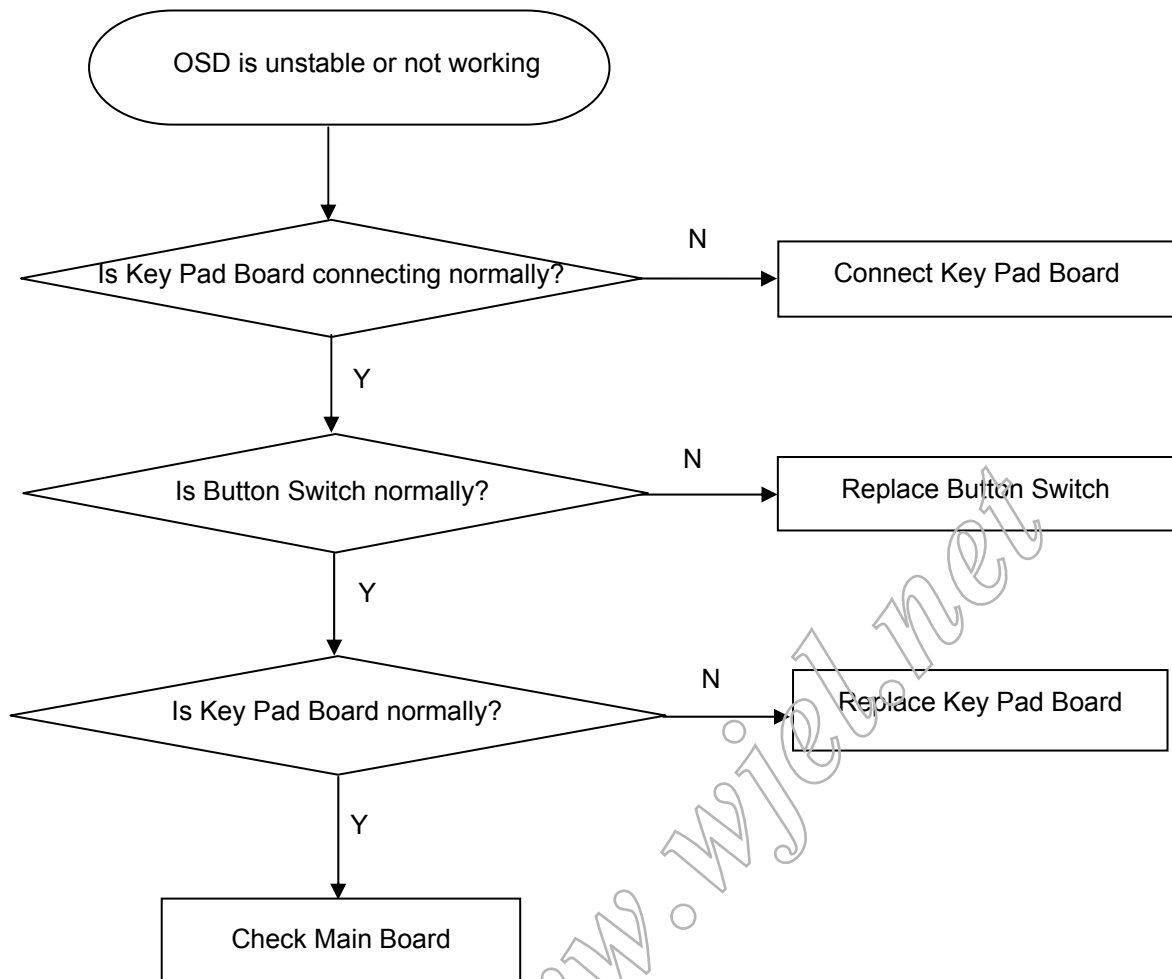


(2) Inverter Board

No Power



8.2.3 Keypad Board



9. White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment. Before started adjust white balance , please set the Chroma-7120 MEM Channel 3 to Reddish (6500K) color, MEM Channel 4 to Default (7200K) color, MEM Channel 9 to Bluish (9300K) color , and MEM Channel 10 to sRGB color (our Reddish color parameter is $x = 313 \pm 20$, $y = 329 \pm 20$, $Y = 160 \pm 20 \text{cd/m}^2$; Default color parameter is $x = 303 \pm 20$, $y = 319 \pm 20$, $Y = 170 \pm 20 \text{cd/m}^2$; Bluish color parameter is $x = 283 \pm 20$, $y = 297 \pm 20$, $Y = 140 \pm 20 \text{cd/m}^2$; sRGB color parameter is $x = 313 \pm 20$, $y = 329 \pm 20$, $Y = 160 \pm 20 \text{cd/m}^2$)

How to setting MEM channel you can reference to chroma 7120 user guide or simple use "SC" key and "NEXT" Key to modify xyY value and use "ID" key to modify the TEXT description Following is the procedure to do white-balance adjust .

2. Setting the color temp. you want

A. MEM.CHANNEL 3 (Reddish color):

Reddish color temp. parameter is $x = 313 \pm 20$, $y = 329 \pm 20$, $Y = 160 \pm 20 \text{cd/m}^2$

B. MEM.CHANNEL 4 (Default color):

Default color temp. parameter is $x = 302 \pm 20$, $y = 318 \pm 20$, $Y = 170 \pm 20 \text{cd/m}^2$

C. MEM.CHANNEL 9 (Bluish color):

Bluish color temp. parameter is $x = 283 \pm 20$, $y = 297 \pm 20$, $Y = 140 \pm 20 \text{cd/m}^2$

D. MEM.CHANNEL 10 (sRGB color):

sRGB color temp. parameter is $x = 313 \pm 20$, $y = 329 \pm 20$, $Y = 160 \pm 20 \text{cd/m}^2$

3. Into Factory mode of Lenovo D170 Wide:

Press the MENU button, pull out the power cord, and then plug the power cord. Then the factory OSD will be at the left top of the panel.

4. Bias adjustment:

Set the **Contrast**  to 50; Adjust the **Brightness**  to 80.

5. Gain adjustment:

Move cursor to "-F-" and press MENU key

A. Adjust Reddish (6500K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x = 313 \pm 20$, $y = 329 \pm 20$, $Y = 160 \pm 20 \text{cd/m}^2$
4. Adjust the RED of color3 on factory window until chroma 7120 indicator reached the value $R = 100$
5. Adjust the GREEN of color3 on factory window until chroma 7120 indicator reached the value $G = 100$
6. Adjust the BLUE of color3 on factory window until chroma 7120 indicator reached the value $B = 100$
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance $= 100 \pm 2$

B. Adjust Default (7200K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x = 303 \pm 20$, $y = 319 \pm 20$, $Y = 170 \pm 20 \text{cd/m}^2$
4. Adjust the RED of color3 on factory window until chroma 7120 indicator reached the value $R = 100$
5. Adjust the GREEN of color3 on factory window until chroma 7120 indicator reached the value $G = 100$
6. Adjust the BLUE of color3 on factory window until chroma 7120 indicator reached the value $B = 100$
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance $= 100 \pm 2$

C. Adjust Bluish (9300K) color-temperature

1. Switch the Chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x = 283 \pm 20$, $y = 297 \pm 20$, $Y = 140 \pm 20 \text{cd/m}^2$
4. Adjust the RED of color1 on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN of color1 on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE of color1 on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance $=100 \pm 2$

D. Adjust sRGB color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x = 313 \pm 20$, $y = 329 \pm 20$, $Y = 160 \pm 20 \text{cd/m}^2$
4. Adjust the RED of color3 on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN of color3 on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE of color3 on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance $=100 \pm 2$

E. Turn the Power-button off to quit from factory mode.

10. Monitor Exploded View

17"W Lenovo D170W爆炸图 V01_20070514

NO.	PART NAME	PART NUMBER	Qty
1	BEZEL	Q34G0177-UFA1B-30	1
2	Power Lens	Q33G0129-2-1C	1
3	Key Button	Q33G0130-A1-1L	1
4	Key Board	KEPC7AA2	1
5	Panel	750GLH70GW112N	1
6	Power Board	PWPC721HL1	1
7	Main Board	CBPC7HRDH4Q1	1
8	Main Frame	Q15G0219-1	1
9	Screw_Power Board	0M1G1730 6120	4
10	Screw_Main Board	0M1G1730 6120	1
11	Screw_Panel/Main frame	0M1G 130 5120	4
12	Rear Cover	A34G0433-UG-1B	1
13	Screw_RC/FB	0Q1G 930 14 47 CR3	1
14	Hinge Ass'y	A37G0031-5	1
15	Stand	A34G0289-UG-1B	1
16	Base	Q34G0178 UG 1B 33	1
17	Screw_Hinge/Stand	AM1G1740 10 47 CR3	4
18	Screw_Hinge/MF	AM1G1740 10 47 CR3	3
19	CABLE CLAMP	Q33G0143 UG 1L 32	1
20	Foot Pad	Q12G6600 6	6
21	EPS Cushion	Q44G7062-1/2	1
22	PE BAG FOR CLAMP	Q45G 88606 16 R	1
23	PE BAG FOR BASE	Q45G 88607 27	1
24	EPE BAG FOR MONITOR	Q45G 88609 93	1
25	PROTECT FILM	Q52G6020-49	1
26	SCREW	0M1G1730 8128 CR3	1

11. BOM List

T77HRDNRWH6NN

Location	Part No. For TPV	Description
	052G 1186	SMALL TAPE
	089G414A18N LS	POWER CORD
	095G801412XE03	WIRE HARNESS 6P-6P 130MM
	0M1G 130 5120	SCREW
	0M1G1730 6120	SCREW
	0Q1G 930 14 47 CR3	SCREW
	750GLH70GW122N	PANEL HSD170MGW1-A01 HSD
	AM1G1740 10 47 CR3	SCREW M3X6
	CBPC7HRDH4Q1	MAIN BOARD
	KEPC7AA2	KEY BOARD
	PWPC721HL1	POWER BOARD
	Q12G6600 6	FOOT
	Q15G0219 1	MAIN FRAME
	Q33G0129 2 1C	LENS POWER
	Q44G7062 1	EPS(L)
	Q44G7062 2	EPS(R)
	Q44G7062608 1A	CARTON
	Q45G 88606 16 R	PE BAG FOR CLAMP
	Q33G0143 UG 1L 32	CABLE CLAMP
	A34G0433 UG 1B	REAR COVER 17
	Q33G0130 AI 1L	KEY BUTTON
	Q34G0177 UFA1B 30	BEZEL L17W-7K
	705GQ734227	STAND ASS'Y 17"
	Q45G 88607 27	PE BAG FOR BASE
	Q45G 88609 93	EPE BAG FOR MONITOR
	Q52G6020 49	PROTECT FILM
	750GLH70GW112N	PANEL HSD170MGW1 A00 HSD
	089G 728HAA 1	SIGNAL CABLE
	089G 728TAA 1	D-SUB CABLE 1800MM
	095G8018 3DE09	LVDS CABLE
	Q40G 58162435A	LABEL
	Q40G 17N608 5A	RATING LABEL
	Q40G000160811A	LABEL
	Q41G780060839A	D170 WIDE QSG
	Q45G 76 28A27	PE BAG FOR MANUAL
	Q70G7006608 3A	CD MANUAL
	050G 600 2	HANDLE1
	050G 600 3	HANDLE2
	052G 1185 56	BIG TAPE FOR LENOVO
	052G 1207 A	ALUMINIUM TAPE
	052G 1211 B	AL TAPE
	052G 1207 A	ALUMINIUM TAPE

	052G 1211 B	AL TAPE
	052G 1207 A	ALUMINIUM TAPE
CN202	033G3802 6	WAFER
CN201	033G3802 9	WAFER 9P RIGHT ANGLE PITCH
CN601	033G8027 24 H	CONN W TO B12P*2 P*2.0 4505-2
	040G 457624 1B	LABEL-CPU
	040G 45762412B	CBPC LABEL
R507	061G152M339 64	CHIPR 3.3 OHM +-5% 2W
C405	067G 3151007KV	ELCAP 10UF M 50V 105°C KINGNICH
C203	067G 3151014KV	EC 105°C CAP 100UF M 25V
C202	067G 3151014KV	EC 105°C CAP 100UF M 25V
C505	067G 3152207KV	ELCAP 22UF M 50V 105°C KING NICH
C604	067G 3154704KV	ELCAP 47UF M 25V 105°C KINGNICH
CN301	088G 35315F H	D-SUB 15PIN
X401	093G 22 45 H	24MHZ/30PF/49US
CN001	033G3802 6H	WAFER 6P RIGHT ANGLE PITCH 2.0
SW004	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW005	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW002	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW003	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW001	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
LED001	081G 12 2 GP	GP36032ME/50-ZO
GND1	095G 900101 D	HARNESS 50MM UL1007
CN802	033G8020 2D F	CONNECTOR
CN801	033G8020 2D F	CONNECTOR
CN802	033G8020 2D U	WAFER
CN801	033G8020 2D U	WAFER
CN802	033G8020 2E F	CONNECTOR
CN801	033G8020 2E F	CONNECTOR
	040G 45762420A	LABEL 25X6MM
IC903	056G 139 7 1	IC EL817MA M-TYPE
IC903	056G 139 3A	PC123Y22FZOF
NR901	061G 58080 WT	8 OHM NCT
C801	065G 3J1506ET	15PF 5% CC45SL 3KV TDK
C902	065G305M1022BM	1000PF 250VAC
C901	065G305M1022BM	1000PF 250VAC
C902	065G305M1022BP	Y2 1000PF M 250VAC Y5P
C901	065G305M1022BP	Y2 1000PF M 250VAC Y5P
C921	065G306M3322BM	3300PF +-20% 250VAC
C921	065G306M3322BP	3300PF 20%
C907	067G 40Z10115K	CAP 105jÆ 100UF M 450V
C802	067G215D4714KV	E.C 105°C CAP 470UF M 25V ED SERIES
C922	067G215D4714KV	E.C 105°C CAP 470UF M 25V ED SERIES
C917	067G215D6814KV	CAP 105°C 680UF M 25V
C918	067G215D6814KV	CAP 105°C 680UF M 25V
C939	067G215S1023KV	105°C 1000UF M 16V

C940	067G215S1023KV	105°C 1000UF M 16V
C915	067G215S4713KV	EC 105°C CAP 470UF M 16V
L902	073G 174 65 H	LINE FILTER
L904	073G 253191 L	CHOKER COIL 1.1UH CC-007802
L903	073G 253191 L	CHOKER COIL 1.1UH CC-007802
T901	080GL17T 33 N	POWER X'FMR
T901	080GL17T 33 DN	XFMR FOR POWER DARFON
T801	080GL17T 40 H	XFMR INVERTER DADON
T801	080GL17T 40 DN	X'FMR TK.2001U.101
CN901	087G 501 32 S	AC SOCKET
BD901	093G 50460 28	BRIDGE DIODE KBP208G LITEON
BD901	093G 50460502	KBP206G
BD901	093G 50460510	2KBP08M 2A 800V
CN902	095G801410D 51	HARNESS 10P-9P 110MM
CN902	095G801410E 51	WIRE HARNESS
	705GQ7 57001	Q901 ASS'Y
	705GQ7 93001	D905 ASS'Y
	705GQ761006	R908 ASS'Y
	705GQ761007	R914 ASS'Y
	705GQ793012	D906 ASS'Y
L901	S73G17476V	FILTER
HS5	Q85G0002 1	SHIELD_MAIN
	A34G0289 UG 1B	STAND
	A37G0031 5	HIGNE
	AM1G1740 10 47 CR3	SCREW M3X6
	Q34G0178 UG 1B 33	BASE LEOVO
U402	056G 158501	AZ431AN-A-E1
U501	056G 562701	SCALER IC RTD2025L QFN-48
U201	056G 585 4A	AP1117E33LA
U401	056G1125701 X	IC MCU RTD2120L-LF REALTEK
U403	056G1133 56	M24C16-WMN6TP
Q202	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q401	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q204	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q205	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q602	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q502	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23
Q501	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23
Q601	057G 763 1	A03401 SOT23 BY AOS(A1)
R302	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R427	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R429	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R313	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R312	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R311	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R309	061G0402101	RST CHIPR 100 OHM +-5% 1/16W

R308	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R306	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R303	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R301	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R410	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R409	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R408	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R435	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R434	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R433	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R432	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R430	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R422	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R420	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R315	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R454	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R453	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R424	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R423	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R402	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R210	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R213	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R404	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R416	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R425	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R436	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R438	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R601	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R207	061G0402121	RST CHIP 120R 1/16W 5%
R208	061G0402121	RST CHIP 120R 1/16W 5%
R201	061G0402201	RST CHIP 200R 1/16W 5%
R304	061G0402202	RST CHIP 2K 1/16W 5%
R305	061G0402202	RST CHIP 2K 1/16W 5%
R426	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R428	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R413	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
R414	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
R401	061G0402392	RST CHIP 3.9K 1/16W 5%
R403	061G0402392	RST CHIP 3.9K 1/16W 5%
R437	061G0402392	RST CHIP 3.9K 1/16W 5%
R202	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R411	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R412	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R451	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R605	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R405	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W

R406	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R407	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R604	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W
R439	061G0402682	RST CHIP 6K8 1/16W 5%
R431	061G0402682	RST CHIP 6K8 1/16W 5%
R415	061G0402682	RST CHIP 6K8 1/16W 5%
R314	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
R310	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
R307	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
R602	061G0805331	RST CHIPR 330 OHM +-5% 1/8W
C411	065G0402100 31	CAP 0402 10PF J 50V NPO
C401	065G0402100 31	CAP 0402 10PF J 50V NPO
C602	065G0402103 22	CHIP 0.01UF 25V X7R
C201	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C204	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C205	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C206	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C209	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C210	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C315	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C403	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C406	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C410	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C501	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C503	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C506	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C507	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C603	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C502	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C402	065G0402105 A5	CAP 0402 1UF K 10V X5R
C412	065G0402105 A5	CAP 0402 1UF K 10V X5R
C404	065G0402224 17	CAP CER 0.22UF -20%-80%
C302	065G0402330 31	33PF +-50% 50V NPO
C303	065G0402330 31	33PF +-50% 50V NPO
C311	065G0402473 12	CHIP 0.047UF 16V X7R
C309	065G0402473 12	CHIP 0.047UF 16V X7R
C307	065G0402473 12	CHIP 0.047UF 16V X7R
C306	065G0402473 12	CHIP 0.047UF 16V X7R
C304	065G0402473 12	CHIP 0.047UF 16V X7R
C301	065G0402473 12	CHIP 0.047UF 16V X7R
C305	065G0402509 31	CHIP 5PF 50V NPO
C308	065G0402509 31	CHIP 5PF 50V NPO
C310	065G0402509 31	CHIP 5PF 50V NPO
FB601	071G 56K121 M	CHIP BEAD
FB503	071G 56K121 M	CHIP BEAD
FB502	071G 56K121 M	CHIP BEAD

FB201	071G 56K121 M	CHIP BEAD
FB301	071G 59K190 B	19 OHM BEAD
FB302	071G 59K190 B	19 OHM BEAD
FB303	071G 59K190 B	19 OHM BEAD
FB501	071G1608151 5Y	CHIP BEAD 1608 150 OHM±25%
D301	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D302	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D303	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D402	093G 64 42 PP	BAV70 SOT-23
ZD307	093G 39S 34 T	UDZS5.6B
ZD305	093G 39S 34 T	UDZS5.6B
ZD304	093G 39S 34 T	UDZS5.6B
ZD303	093G 39S 34 T	UDZS5.6B
ZD301	093G 39S 34 T	UDZS5.6B
ZD302	093G 39S 34 T	UDZS5.6B
	715G2498 1 AO	MAIN BOARD PCB
R003	061G0603180 1F	RST CHIPR 1.8 KOHM +-1% 1/10W
R004	061G0603180 1F	RST CHIPR 1.8 KOHM +-1% 1/10W
R005	061G0603300 1F	RST CHIPR 3 KOHM +-1% 1/10W
R002	061G0603300 1F	RST CHIPR 3 KOHM +-1% 1/10W
C007	065G0603104 32	CHIP 0.1UF 50V X7R
C008	065G0603104 32	CHIP 0.1UF 50V X7R
C009	065G0603104 32	CHIP 0.1UF 50V X7R
C010	065G0603104 32	CHIP 0.1UF 50V X7R
C006	065G0603104 32	CHIP 0.1UF 50V X7R
Q901	057G 667 30	2SK2645
Q901	057G 724 11	STP9NK65ZFP
HS3	090G6263 1	HEAT SINK
	0M1G1730 8128 CR3	SCREW
HS4	090G6084 1 GP	HEAT SINK
D905	093G 60257	DIODE SB1060FCT ITO-220AB BY PAN JIT
D905	093G 60273	DIODE SP1060 ITO-220 SECOS
	0M1G1730 10128 CR3	SCREW
R908	061G152M10458F	100K OHM 5% 2W
	096G 29 8	TUBE
R914	061G152M478 64	0.47 OHM 5% 2W
	096G 29 1	SHRINK TUBE UL/CSA
D906	093G 60218	SB10100FCT
D906	093G 60267	SP10100
	0M1G1730 8128 CR3	SCREW
HS2	Q90G6263 2	HEAT SINK
IC801	056G 368 14	IC SMPS KA7500CDTF SOIC-16
IC901	056G 379 76	IC LD7552BPS SOP-8
Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q806	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q811	057G 417 4	PMBS3904/PHILIPS-SMT(04)

Q903	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q804	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q812	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q903	057G 417 12 T	KEC 2N3904S-RTK/PS
Q811	057G 417 12 T	KEC 2N3904S-RTK/PS
Q806	057G 417 12 T	KEC 2N3904S-RTK/PS
Q801	057G 417 12 T	KEC 2N3904S-RTK/PS
Q804	057G 417 13 T	KEC 2N3906S-RTK/PS
Q812	057G 417 13 T	KEC 2N3906S-RTK/PS
Q810	057G 759 2	RK7002
Q809	057G 759 2	RK7002
Q808	057G 760 4B	PDTA144WK SOT346
Q805	057G 760 5B	PDTC144WK SOT346
Q802	057G 763 14	AM9945N
R823	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R801	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R808	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R814	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R818	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R821	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R822	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R824	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R827	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R926	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R942	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R863	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R832	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R828	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R820	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R817	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R807	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R813	061G0603102	RST CHIP 1K 1/10W 5%
R835	061G0603105	RST CHIPR 1 MOHM +-5% 1/10W
R862	061G0603105	RST CHIPR 1 MOHM +-5% 1/10W
R803	061G0603106	RST CHIPR 10 MOHM +-5% 1/10W
R930	061G0603243 1F	RST CHIPR 2.43 KOHM +-1% 1/10W
R940	061G0603330 2F	RST CHIPR 33 KOHM +-1% 1/10W
R927	061G0603360 1F	RST CHIPR 3.6 KOHM +-1% 1/10W
R811	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R851	061G0603510 1F	RST CHIPR 5.1 KOHM +-1% 1/10W
R841	061G0603680 2F	RST CHIPR 68 KOHM +-1% 1/10W
R853	061G0603683	RST CHIPR 68 KOHM +-5% 1/10W
R802	061G0603910 2F	RST CHIP 91K 1/10W 1%
R831	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W
R915	061G0805100 3F	RST CHIPR 100KOHM +-1% 1/8W
R804	061G0805101	RST CHIPR 100 OHM +-5% 1/8W

R826	061G0805102	RST CHIPR 1KOHM +-5% 1/8W
R925	061G0805102	RST CHIPR 1KOHM +-5% 1/8W
R943	061G0805102	RST CHIPR 1KOHM +-5% 1/8W
R938	061G0805103	10 KOHM 1/10W
R924	061G0805151	RST CHIPR 150 OHM +-5% 1/8W
R825	061G0805220	22&8 1/10W
R829	061G0805220	22&8 1/10W
R839	061G0805220	22&8 1/10W
R850	061G0805220	22&8 1/10W
R837	061G0805473	RST CHIPR 47 KOHM +-5% 1/8W
R810	061G0805510 2F	RST CHIPR 51 KOHM +-1% 1/8W
F801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
JR801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
JR901	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
JR902	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
R910	061G1206100	RST CHIP 10R 1/4W 5%
R962	061G1206101	100 1206
R961	061G1206101	100 1206
R935	061G1206101	100 1206
R920	061G1206101	100 1206
R919	061G1206101	100 1206
R918	061G1206101	100 1206
R946	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R945	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R944	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R941	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R912	061G1206221	RST CHIPR 220 OHM +-5% 1/4W
R933	061G1206304	300 KOHM 1/8W
R932	061G1206304	300 KOHM 1/8W
R904	061G1206304	300 KOHM 1/8W
R856	061G1206330	RST CHIPR 33 OHM +-5% 1/4W
R855	061G1206330	RST CHIPR 33 OHM +-5% 1/4W
R909	061G1206519	RST CHIPR 5.1 OHM +-5% 1/4W
R902	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
R901	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
R900	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
C842	065G0603103 32	0.01UF +-10% 50V X7R
C807	065G0603104 22	CHIP 0.1UF 25V X7R
C821	065G0603104 22	CHIP 0.1UF 25V X7R
C825	065G0603104 22	CHIP 0.1UF 25V X7R
C834	065G0603104 22	CHIP 0.1UF 25V X7R
C819	065G0603222 22	CHIP 2200PF 25V X7R
C823	065G0603222 22	CHIP 2200PF 25V X7R
C838	065G0805102 31	1000PF 50V NPO
C839	065G0805102 31	1000PF 50V NPO
C932	065G0805102 31	1000PF 50V NPO

C928	065G0805103 32	10NF/50V/0805/X7R
C924	065G0805104 32	CHIP 0.1U 50V X7R
C930	065G0805104 32	CHIP 0.1U 50V X7R
C916	065G0805104 32	CHIP 0.1U 50V X7R
C824	065G0805104 32	CHIP 0.1U 50V X7R
C905	065G0805104 32	CHIP 0.1U 50V X7R
C822	065G0805105 22	CHIP 1UF 25V X7R 0805
C820	065G0805221 31	220PF 50V NPO
C845	065G0805225 12	CHIP 2.2UF 16V X7R 0805
C909	065G0805471 21	CHIP 470PF 25V NPO
C912	065G1206102 72	CHIP 1000PF 500V X7R
C929	065G1206102 72	CHIP 1000PF 500V X7R
D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D805	093G 64 44 S	LL4148WP
D806	093G 64 44 S	LL4148WP
D807	093G 64 44 S	LL4148WP
D812	093G 64 44 S	LL4148WP
D813	093G 64 44 S	LL4148WP
D814	093G 64 44 S	LL4148WP
D817	093G 64 44 S	LL4148WP
D903	093G 64 44 S	LL4148WP
D915	093G 64 44 S	LL4148WP
D916	093G 64 44 S	LL4148WP
D813	093G 6432S	IN4148W
D916	093G 6432V	LL4148-GSO8
D915	093G 6432V	LL4148-GSO8
D903	093G 6432V	LL4148-GSO8
D817	093G 6432V	LL4148-GSO8
D814	093G 6432V	LL4148-GSO8
D812	093G 6432V	LL4148-GSO8
D807	093G 6432V	LL4148-GSO8
D806	093G 6432V	LL4148-GSO8
D805	093G 6432V	LL4148-GSO8
D801	093G 6433P	BAV99
D802	093G 6433P	BAV99
ZD801	093G 39S 10 T	RLZ6.8B LLDS
ZD906	093G 39S 20 T	RLZ22B LLDS
ZD922	093G 39S 25 T	RLZ5.1B LLDS
ZD902	093G 39S 40 T	RLZ 13B LLDS
ZD921	093G 39S 40 T	RLZ 13B LLDS
ZD905	093G 39S 44 T	RLZ18B LLDS
	034FPF20P01	BOBBIN
	Q34FPE19P06	CASE EEL19
	715G2515 1	KEY BOARD PCB
CN901	006G 31500	EYELET

IC904	056G 158 10 T	IC AZ431AZ-AE1 TO-92 BY AAC
IC904	056G 158 12	KIA431A-AT/P TO-92
C938	065G 1K152 1T	1.5NF/1KV Z5F+-10%
C906	065G 2K152 1T GP	CERAMIC CAP
C908	067G215Y2207KT	CAP 105°C 22UF M 50V KINGNICH
FB801	071G 55 9 T	FERRITE BEAD
FB901	071G 55 29	FERRITE BEAD
F901	084G 55 7W	FUSE 3.15A 250V WICKMANN
F903	084G 56 4W	FUSE 4.0A 250V
D900	093G 6026T52T	RECTIFIER DIODE FR107
D901	093G 6038T52T	FR103
	715G2545 1 2	POWER BOARD PCB

<http://www.wjel.net>

12. Different Parts List

Diversity of T78GRDNCRWG2NC Compared with T77HRDNDNRWH6NN		
Location	Part No. for TPV	Description
U401	056G1125701 X WLNRRWR7GNQ2	IC MCU RTD2120L-LF REALTEK
	019G6014 1	TIE FOR STRAP
	040G 45760850A	CERTIFICATION LABEL
	040G 581 26704	SHIPPING LABEL
	044G9003 12	CORNER PAPER
	050G 600 1 W	WHITE STRAP
	089G179W30N500	FFC CABLE
	0M1G 130 6120	SCREW M3X6
	750GLG171W3C11N0LX	PANEL LM171WX3-TLC1 KR LGD
	CBPC8LRDG2Q1	MAIN BOARD G2498-2-K-X-13-080512
CN601	033G801930F CH JS	CONNECTOR
D303	093G 6433S	DIODE BAV99 SEMTECH
D302	093G 6433S	DIODE BAV99 SEMTECH
D301	093G 6433S	DIODE BAV99 SEMTECH
	715G2498 3 K	MAIN BOARD PCB
	KEPC7QV2	KEY BOARD G2515-1-X-X-6-080313
ZD005	093G 39P599 T	MM3Z5V6B
ZD004	093G 39P599 T	MM3Z5V6B
ZD003	093G 39P599 T	MM3Z5V6B
ZD002	093G 39P599 T	MM3Z5V6B
ZD001	093G 39P599 T	MM3Z5V6B
	Q07G 8 3 2	COMPOUND PALLET
	Q07G 8 3 3	COMPOUND PALLET
	Q15G0219 2	MAIN FRAME
	Q40G000160814B	CARTON LABEL
	Q40G000260830A	INDIA STICKER LABEL
	Q41G780060843B	QSG
	Q44G9003 80	CORNER PAPER
	Q45G2007M0203A	PE BAG FOR LENOVO
	Q70G7006608 6B	CD MANUAL
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG

Diversity of T78GRDNCRWG1NC Compared with T77HRDNDNRWH6NN		
Location	Part No. for TPV	Description
U401	056G1125701 X WLNRRW7GNQ1	IC MCU RTD2120L-LF REALTEK
	019G6014 1	TIE FOR STRAP
	040G 45760850A	CERTIFICATION LABEL
	040G 581 26704	SHIPPING LABEL
	044G9003 12	CORNER PAPER
	050G 600 1 W	WHITE STRAP
	089G179W30N500	FFC CABLE
	0M1G 130 6120	SCREW M3X6
	750GLG171W3C22N0LX	PANEL LM171WX3-TLC2 NJ LGD
	CBPC8LRDG1Q1	MAIN BOARD G2498-2-K-X-13-080512
CN601	033G801930F CH JS	CONNECTOR
D303	093G 6433S	DIODE BAV99 SEMTECH
D302	093G 6433S	DIODE BAV99 SEMTECH
D301	093G 6433S	DIODE BAV99 SEMTECH
	715G2498 3 K	MAIN BOARD PCB
	KEPC7QV2	KEY BOARD G2515-1-X-X-6-080313
ZD005	093G 39P599 T	MM3Z5V6B
ZD004	093G 39P599 T	MM3Z5V6B
ZD003	093G 39P599 T	MM3Z5V6B
ZD002	093G 39P599 T	MM3Z5V6B
ZD001	093G 39P599 T	MM3Z5V6B
	Q07G 8 3 2	COMPOUND PALLET
	Q07G 8 3 3	COMPOUND PALLET
	Q15G0219 2	MAIN FRAME
	Q40G000260830A	INDIA STICKER LABEL
	Q41G780060843B	QSG
	Q44G9003 80	CORNER PAPER
	Q45G2007110203A	PE BAG FOR LENOVO
	Q70G7006608 6B	CD MANUAL
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG
	Q40G000160814B	CARTON LABEL